

Austria	Sch. 15	Indonesia	Rp 2500
Bahrain	Dec. 0.85	Italy	L 1100
Belgium	Fr. 35	Japan	Y550
Canada	C\$2.50	Jordan	Fr. 500
Cyprus	Malta 800	Lebanon	Fr. 500
Denmark	Nkr. 1.00	Lebanon	L 6.00
Egypt	£2.00	Sweden	SEK 0.50
Finland	Fr. 35	Tunisia	MT 500
France	Fr. 5.50	Tunisia	MT 500
Germany	DM 2.00	Morocco	Dir. 0.00
Greece	Dr. 2.25	Tunisia	MT 100
Hong Kong	HKS 15	Morocco	Dir. 6.50
Ireland	Fr. 20	Tunisia	MT 100
Philippines	Pes. 20	U.A.E.	Dir. 6.50
U.S.A.	\$1.50		



# FINANCIAL TIMES

EUROPE'S BUSINESS NEWSPAPER

No. 29,155

Wednesday October 26 1983



EEC chases the phantom of free internal trade, Page 2

D 8523 B

## NEWS SUMMARY

### GENERAL

### Missiles arrive next month

U.S. cruise and Pershing missiles are expected to arrive in Europe towards the end of November, immediately after the Bundesrat has held its crucial debate on the issue.

According to senior U.S. officials, 32 cruise and nine Pershing 2 missiles are ready to be airlifted from the U.S. to Britain, Italy and West Germany. However, the actual timing of the arrival is giving problems. Page 16

In the U.S. police arrested 1,200 demonstrators around the country for strewing ashes, climbing fences and lying across roads in protest at deployment of the missiles.

### Car bomb alert

French police and security forces have been alerted to look out for an Italian-registered red Ciroen car believed packed with explosives and being driven somewhere in France.

### Madrid tightens up

Spain's Socialist Government has been forced to tighten its line on terrorism, following increasing Basque violence and behind-the-scenes pressure from military leaders. Page 2

### De Lorean delay

The trial of John De Lorean, former car chief, on charges of drug trafficking has been postponed a week while defence lawyers prepare motions for dismissal of all charges. Page 8

### Greece alleges plot

Greece's Prime Minister Andreas Papandreou said there is an "international plot based in the U.S. to sabotage the Greek economy and bring down his Government." Page 2

### Ambassador shot

A gunman shot and critically wounded Jordan's ambassador to India as he was walking home to lunch in Delhi's diplomatic quarter. Page 4

### Explosion kills five

Five people died and 16 were injured when a gas explosion ruptured through the Royal Duxford Hotel, Aberdeen, Scotland.

### Berlin match fears

West Berlin is posting 6,000 police around its soccer stadium and another 10,000 through the city tonight following threats of neo-Nazi violence when Turkey plays West Germany in the European championship. Page 3

### Soviets 'killed 100s'

Western diplomatic sources in Pakistan said several hundred people were killed earlier this month in a five-day Soviet bombardment of the Afghan village of Iskandar, north of Kabul.

### Heath denies claim

Former UK Premier Edward Heath said there was no truth whatever in allegations made in a court case that he had appeared in pornographic photographs.

### Riot over train

More than 5,000 Sao Paulo commuters, angry because their train was half an hour late, burned a police car, looted a nearby supermarket, and rioted streets at three trains in the station.

### Briefly...

Oleg Blinov, editor of Moscow weekly Literary Gazette, fled to Britain. Belgian police seized 30,000 bogus Smurf dolls covered with a paint harmful to children.

### BUSINESS

### France steps up shipyard subsidies

BY TONY COZIER IN BRIDGETOWN, BARBADOS

THE CARIBBEAN island of Grenada was invaded early yesterday morning by a force of U.S. Marines and parachute troops, estimated to be about 1,500 strong. The invasion of the island, a former British colony, was backed by about 300 troops from six Caribbean countries involved were afloat on the island to farm a peace-keeping force.

An unidentified American voice, broadcasting from an emergency radio station soon after the landing, said: "Friendly forces from neighbouring Caribbean countries and the United States have arrived in Grenada to protect lives and restore order."

Grenada has been ruled by a revolutionary military council since last Wednesday when the Prime Minister Mr Maurice Bishop, three of his cabinet ministers and two trade union leaders were killed by troops in a coup.

• WALL STREET: the Dow Jones index closed up 3.6 to 1,232.44. Report, Page 25; full share listings, Pages 26-28

• LONDON: FT Industrial Ordinary index gained 2.7 to 688. Government Securities moved higher, reflecting confidence over containing government spending. Report, Page 25; FT Share Information Service, Pages 30-32

• TOKYO: Nikkei Dow index fell 27.9 to 9,232.77. Stock Exchange index rose 0.1 to 675.47. Report, Page 25; leading prices, other exchanges, Page 28

• FRANKFURT: Commerzbank index rose 15 to a 23-year high of 1,017.5 on the improvement in prospects for increased share earnings. Report, Page 25; leading prices, Page 28

• DOLLAR rose to DM 2,067.5 (DM 1,906.5) and was unchanged at FF 7,935 but fell to SF 2,116 (SF 2,117.5) and Y222.5 (Y223.25). Its Bank of England trade-weighted index was 126 (126.3). In New York it closed at DM 2,650; FF 7,936; SF 2,115 and Y222.5. Page 35

• STOCKHOLM fell 5 points to 5,499, was unchanged at DM 3.81 but ended at FF 11,222.5 (FF 11,225), SF 2,173 (SF 2,175) and Y222.5 (Y223.25). Its trade-weighting was 82.5 (83.6). In New York it closed at \$1,495. Page 35

• GOLD rose \$2.5 in London to \$308.625. In Frankfurt it rose \$2.25 to \$308.25 and in Zurich \$4 to \$308.25. In New York the Comex October settlement price was \$307.5 (\$307.5). Page 34

• SWEDEN's Finance Minister announced new taxes on share transactions. Page 17

• AIRLINE industry representatives at Iata meeting in Delhi are considering penalising airlines which practice "ticket discounting." Page 9

• NEW ZEALAND electricity workers called off pay dispute after premier Robert Muldoon threatened to withdraw recognition of their union. Page 4

• PHILIPPINES central bank imposed indirect control on 11 types of electronics imports to conserve foreign exchange. Page 9

• ITALY's stock exchange watchdog Consob was thrown into turmoil when its chairman and another board member resigned. Page 16

### COMPANIES

• ELECTROLUX, the Swedish household appliance group, is to sell its Hugo cash register subsidiary to management for £13m (\$19.5m). Page 11

• BROKEN HILL'S October 31 deadline for its planned \$2.4bn acquisition of Utah International will not be met. Page 19

• EXXON increased third quarter net income by 20.5 per cent to \$1.25bn. Page 16

• MERRILL LYNCH, the largest U.S. securities group, suffered a 67 per cent drop in net earnings to \$3.81m in the third quarter. Page 17

### CONTENTS

Europe	2, 3	Energy Review	
Companies	17	Eurobonds	36
America	8	Euro-options	36
Companies	17, 19	Financial Futures	36
Overseas	4	Gold	36
Companies	19	Int. Capital Markets	36
World Trade	9	Letters	36
Britain	10, 11	Lex	36
Companies	20-23	Management	36
Europe	2, 3	Market Monitor	36
Companies	17	Men and Matters	36
America	8	Mining	36
Companies	17, 19	Money Markets	36
Overseas	4	New Materials	36
Companies	19	Stock markets - Bourses	25, 26
World Trade	9	- Wall Street	25, 26
Britain	10, 11	- London	25, 26
Companies	20-23	Technology	36
Agriculture	34	Unit Trusts	36
Appointments	34	Weather	36
Arts Review	24		
World Guide	24		
Commodities	24		
Currencies	24		
Editorial comment	14		

Brazil and IMF: a battle of wills and wits	14	Energy: London launch for crude oil futures	12
UK consumer spending: the boom that refuses to die	15	Management: how American Can packages software	6
W. Germany: power struggle at MAN	17	Lex: Burnett & Hallamshire; Gallaher; UK property	16
EEC: chasing the phantom of free internal trade	2	Editorial comment: Grenada; UK health service	14
Airlines: Iata grapples with discount fares	9	Selby coalfield: Survey	Section IV

## U.S. leads invasion of Grenada

BY TONY COZIER IN BRIDGETOWN, BARBADOS

The marines landed just after dawn in helicopters which had flown from Grantley Adams airport in Barbados and a U.S. naval task force just off Grenada. The plan was that they would establish control before the troops and police men from the Caribbean countries involved were afloat on the island to farm a peace-keeping force.

Sources in Barbados said the troops encountered no resistance in capturing the small Peartree airport near the town of Grenville on the western side of the island, which is only 21 miles long. But there was fighting with the estimated 300 Cuban workers at the new international airport at Pointe Salines on the eastern side, near the capital St George's.

The Americans who had been strong supporters of Mr Bishop's regime since it ousted the Government of Sir Eric Gairy in a coup in March

1976, had supplied most of the technical and manpower needs of the new airport. Reports in Barbados said three of them had been killed and 22 injured in the fighting.

Although the airport is not yet officially opened, its runway is complete and ready to take landings from large jets. Sources in Barbados said it would be used to bring in trucks and equipment from the U.S. naval task force, which is headed by the aircraft carrier U.S.S. Independence.

In addition, reports said 32 military advisers from the Soviet Union had been brought in to help the Americans to run the airport.

The military rulers in Grenada had been expecting the invasion and Radio Free Grenada reported "United States paratroopers with helicopter gunships" had landed at 5.30 a.m.

A frantic announcer on the station called on "all Grenadians to come out and defend our country" and asked "all friendly countries to condemn this act of aggression and

immediately come to Grenada's assistance."

One of the station's two frequencies went off the air 33 minutes after the reported time of the landing. The second continued for another hour and a half, broadcasting calls to Grenadians to "fight against the forces of Satan."

The decision to take military action against the revolutionary military council, headed by army chief General Hudson Austin, had been planned here last Friday by the leaders of the Organisation of Eastern Caribbean (OECS) States - Antigua, Dominica, Montserrat, St Kitts-Nevis, St Lucia and St Vincent.

They had immediate support from the Prime Minister of Barbados, Mr Tom Adams, and the Prime Minister of Jamaica, Mr Edward

Continued on Page 16



## Thatcher 'opposed military solution'

BY PETER RIDDELL, POLITICAL EDITOR, IN LONDON

MRS MARGARET THATCHER, Britain's Prime Minister, had definitely warned President Ronald Reagan against a U.S. invasion of Grenada. However, Sir Geoffrey Howe, UK Foreign Secretary, yesterday landed both himself and the Conservative Government in a major political row by refusing to criticise the U.S. action publicly.

Mr Reagan later said that he had received reports of casualties, while the Pentagon said that the forces had met resistance.

The collective action, including forces from Antigua, Barbados, Dominica, Jamaica, St Lucia and St Vincent, had been forced on us by events that have no precedent in the eastern Caribbean and no precedent in any civilised society," Mr Reagan said.

The unanimous request for help had come on Sunday from the five-member Organisation of Eastern Caribbean States (OECS), under the organisation's treaty of mutual support for democracy, Mr Reagan said.

A senior official said that the U.S.

troops would be withdrawn as soon as order was restored. Congressional leaders said they had been told that the troops - composed of 400 to 500 Marines and over 1,000 Army Ranger parachute troops - would be out of the island in a week, if it's possible.

Meanwhile, the U.S. and its allies

meanwhile the formation of a provisional government under Mr Paul Scoon, the governor general, who has been under house arrest since Mr Bishop took power in 1979, U.S. officials said.

Mr Tip O'Neill, the Democratic Speaker of the House of Representatives, said that Mr Reagan planned to notify Congress of the invasion within 48 hours under the 1973 War Powers Act, which requires the President to inform Congress when U.S. troops are sent into hostilities abroad.

Mr Reagan later said that he had received reports of casualties, while the Pentagon said that the forces had met resistance.

The two airfields on the island had been secured by the two airstrips on the island and the medical school attended by the American students.

Mr Edward Seaga, the Jamaican Prime Minister, claimed that 12 Cuban

troops were killed.

The 300 troops from the other Caribbean countries had not been part of the original invasion force, but had been brought in later, the Pentagon said. U.S. forces had detained about 30 Soviet and 50 Cuban

prisoners.

## EUROPEAN NEWS

## Eta violence forces Madrid to harden line on terrorism

BY TOM BURNS IN BUENOS AIRES

INCREASING Basque violence and behind-the-scenes pressure from military leaders has prompted a significant re-appraisal of the terrorist issue by the Socialist Government. A senior government spokesman said a package of measures was being drawn up which included the possible banning of political groups that condoned terrorism.

Details of the package were revealed on Monday by Sr Felipe Gonzalez, the Prime Minister, to Sr Manuel Fraga Iribarne, the opposition leader, who said subsequently that the Government's proposals would be fully backed by his conservative Alianza Popular party in Parliament.

The spokesman said the measures would rectify "an inertia" on the part of the Government towards terrorism that contrasted with action taken by other Western European administrations. As examples of the latter he cited the banning of Corsican nationalist parties by France, stepped-up police powers in West Germany and Italy, and the former policy of interment in Northern Ireland.

One measure went into effect yesterday when the prison of Herrera de la Mancha, recently built as a maximum security jail in an isolated part of Ciudad Real province, south east of Madrid, was cleared of inmates to make way for men

bers of Eta, the Basque separatist organisation serving sentences elsewhere.

All imprisoned members—numbering some 330—at Eta's several factions are to be transferred to Herrera de la Mancha in what officials say will be a Spanish version of the Maze prison in Northern Ireland.

The murder by Eta last week of an army captain whom it had kidnapped at the beginning of the month stunned Spaniards. According to Spanish political commentators, it brought to a head a latent demand among senior army officers that a far tougher line should be taken against terrorism. Large protest marches, sponsored by the Government, took place last week to demonstrate against the murder.

Since then Eta have shot dead an alleged informant, the 36th victim of Basque political violence this year, and staged bomb attacks against a Guards Civil barracks in the province of Navarre and against the main headquarters in San Sebastian.

The most controversial aspects of the anti-terrorism measures concern veiled backing by the Interior Ministry for undercover activities against Eta members and the possible banning of Herri Batasuna, the radical nationalist coalition that is the third political force in the Basque country.

## Rising domestic sales aid W. German car recovery

BY JOHN DAVIES IN FRANKFURT

CAR PRODUCTION is continuing to recover in West Germany, stimulated mainly by a sharp revival in domestic sales. Output of small trucks and vans is also picking up, but heavier trucks are still deep in recession.

More than 370,000 cars rolled off the assembly lines last month, 8 per cent more than a year ago. Since the beginning of the year, output at 2.87m is running just 1 per cent below a year earlier and the gap has been steadily narrowing.

New car registrations in West

Germany were 23.4 per cent higher last month than a year earlier and 13.6 per cent higher in the first nine months. But foreign manufacturers are among those to have gained, raising their share of the market in the nine-month period from 25 per cent to 26.8 per cent.

West German car exports of 100,200 last month were 1 per cent down on a year ago.

More than 26,000 commercial vehicles were produced last month, 7 per cent more than in September last year.

Second Swiss \$40m credit for Yugoslavia

By John Wicks in Zurich

THE SWISS national bank has granted a further medium-term credit of \$40m (£25m) to Yugoslavia. This follows a similar credit for the same amount at the end of September arising out of an earlier pledge in connection with a bridging loan granted to Yugoslavia by the Bank for International Settlements.

Disbursement of the second \$40m is said to have begun at the start of this month.

The full \$50m will have been transferred by mid-December.

## EEC chases phantom of free internal trade

John Wyles reports on an elusive goal for the Community



Dr. Carli . . . "dissillusion and mistrust in business world."

only for the elimination of technical and regulatory barriers to trade, but also to the harmonisation of financial systems, the promotion of new forms of co-operation in high technology, and the emergence of a common transport policy.

In the realm of non-tariff barriers, the only success chalked up so far came in June with the adoption by the internal market council of a directive ensuring prior consultations between member states before new technical standards and norms are adopted by national authorities.

However, proposals to be discussed today for moving people and goods more quickly and cheaply through border controls within the Community remain trapped in a web of political and technical obfuscation.

A similar deadlock—for which France is largely responsible—prevails over 20 directives which would set common technical standards for a variety of goods from cars to medical equipment.

France wants to be sure that each of these directives will not mean the surrender of all national controls over imports from non-Community countries. Theoretically, once a third country manufacturer has a certificate of conformity to EEC standards his products should have easy access to all Ten markets.

France is particularly worried that, as the adoption 25 years ago for common external tariffs for the EEC was the natural consequence of the removal of internal tariff barriers, so further consolidation of the common market must be accompanied by the creation of at least one new protective device.

This is the so-called common commercial policy instrument, created by the Commission last February to accommodate the

French, which would supposedly answer the need to respond "more swiftly and effectively" to unfair trade practices by non-member countries.

Adoption of this proposal is France's pride for compromising on the third country verification problem. But it is a price which West Germany, the Netherlands, and Denmark are very reluctant to pay. They argue that it sends out a protectionist signal at a time when the EEC ought to be trying to roll back protectionism in the world.

It would be wrong, however, to paint France only as an obstacle to genuine progress on the internal market. President Francois Mitterrand's government is now showing a stronger awareness than before of the growth opportunities offered by

an effective European market. Evidence of new thinking in Paris was clearly apparent in proposals tabled by France last month which called for the progressive opening up of public purchasing policies to all potential Community suppliers and for the definition of Community norms and standards for new products.

The Commission is seeking this and much more. It wrote the Community summit in Athens in December to call for a review of all national technical standards and regulations, and for the scrapping of all that are "no longer justified."

Nevertheless, the pace of progress seems destined to remain slow. Within the Commission, the blame is laid firmly at the door of national bureaucrats and technicians. While heads of government and top businessmen may be aware of the political and economic fragmentation caused by non-tariff barriers, national experts and officials are said to see only interests to be traded away for little guaranteed return.

Thus, while the removal of border formalities to goods traffic may save between 10 and 10 per cent of the value of the products in transit, officials in countries such as France and Italy worry about the impact on national producers and about a flood of imports worsening already difficult balance of payments problems.

"The inertia of national bureaucracies remains the most significant constraint on the internal market," said Herr

Karl Heinz Nierus, the Commissioner responsible for the internal market, recently.

As a further example of this inertia, Commission officials point to the fate of their attempt to secure agreement on a single customs document for the exchange of goods—an hardly unusual for ministerial discussions today, at working-group level, national experts have produced a bazaar of 160 amendments to the Commission's draft document.

Yet only last week the three Benelux governments were able to agree on the introduction from next year of a single customs document for the trade between them.

Ministers may today make some movement towards an agreement guaranteeing to keep frontier posts open to road traffic for a full 24-hour period. But this could be hedged about by the qualification that opening hours would depend on whether the volume of traffic justifies it. Moreover, France and Greece want to leave this judgment in the hands of national authority.

The same two countries want to exclude air and sea transport from any arrangements for cross-border traffic on the grounds that this would give the Community a role in negotiating international conventions.

It is just such fear and mistrust of the "Community dimension" which has dogged many attempts over the past 10 years to complete the internal market. Dr. Carli's warning of difficulties could be amply demonstrated by a low turnout in next June's elections to the European Parliament.

mon sycophants" he said.

The Government has so far limited its answer to warning Mr Avernes that "he would do better not to talk." A spokesman yesterday refused to elaborate further on Mr Papandreou's statements or to say whether there will be any investigation.

**FINANCIAL TIMES LTD 1983 No. 10000.  
Published daily except Sundays and  
bankers. U.S. subscription rates  
\$20.00 per annum. Second class  
postage paid at New York NY and at  
other mailing offices throughout the  
U.S.A. Postmaster: Please address changes to:  
FINANCIAL TIMES, 26 Rockefeller  
Place, NY, NY 10020.**

## Papandreu sees another plot to bring him down

BY ANDRIANA PERDIAKONOU IN ATHENS

THE GREEK Prime Minister Mr Andreas Papandreu believes there is an international right-wing plot based in the United States to sabotage Greece's economy and bring down his Socialist (Pseok) Government.

He said in a newspaper interview: "Our right-wing opponents have come up with \$120m to open an office in Chicago, which will pour poison to undermine the economy and our government. An unpatriotic battle is under way to influence international banking and business circles which would only be waged by men of no conscience."

Mr Papandreu's startling accusations, made to the pro-Government Athens Daily newspaper, Ta Nea, have temporarily given the Socialists the last word in an escalating propaganda war against the right-wing New Democracy Party, Greece's main opposition group.

The political temperature in the country is running high after last week's mass rally by Pasok and New Democracy in the main cities of Athens and Salonia, to mark the mid-point of the Papandreu Government's term. However, unless Mr Papandreu backs up his claims soon with concrete evidence,

they are likely to end up placing new strains on the Government's credibility.

This is not the first time the Prime Minister has spoken of a right-wing conspiracy against the Socialists, each time without any further explanation.

A year ago he pointed a finger at unnamed senior members of New Democracy whom he accused of waging an economic propaganda war against Pasok in Western capitals. But no specific details were ever brought forward.

Just 10 days ago, leading a meeting of the prime ministers of France, Italy, Spain and

Portugal in Athens, Mr Papandreu spoke of a conspiracy by bodies such as the International Monetary Fund, the Organisation for Economic Co-operation and Development and the World Bank against the European Socialist experiment. The subject subsequently was quietly dropped by his European colleagues.

His accusations were angrily dubbed "slanderous fireworks" yesterday by Mr Evangelos Avernos, the New Democracy leader. "Unless the Prime Minister can come up with reliable evidence within three days he is nothing but a com-

## Caledonian Girls to St. Louis: Non-stop, from Oct 23rd.

If you have business in St. Louis, you can fly there non-stop with British Caledonian from October 23rd.

We offer convenient connections to Chicago, Kansas City, Denver and many other destinations in the Mid-West.

For further details contact your travel agent or call British Caledonian on 01-668 4222.

We never forget you have a choice.

**British Caledonian.**

This announcement appears as a matter of record only.



## EUROPEAN INVESTMENT BANK

Luxembourg

**DM 100,000,000  
8% Bonds due 1988  
- Private Placement -**

**WESTDEUTSCHE LANDES BANK  
GIROZENTRALE**

## IN 1784, WE STARTED ANOTHER AMERICAN REVOLUTION. BANKING.

Back when Boston was a bustling seaport of 17,000 people, James Bowdoin—patriot, philosopher, and Governor of Massachusetts—had a brave, new idea. He founded a bank to serve the people.

Before then, if you needed money, you were forced to obtain a difficult loan from a wealthy merchant.

So on the day after the Fourth of July in 1784, what is now Bank of Boston opened for business.

Over the past 200 years we have led the way in commercial banking.



We were the first to offer long-term, unsecured business loans. The first to be involved in factoring. And our export credit management service is the oldest and most extensive in the country.

Today, we serve a market of over a half-billion, with more than 200 offices in 40 countries around the world and throughout the U.S.

So if you are a company determined to pursue your brave, new ideas to work, we are the bank determined to help you do it.

**BANK OF BOSTON**

WORLD HEADQUARTERS BOSTON U.S. OFFICES IN DALLAS • CHICAGO • HOUSTON • LOS ANGELES • MIAMI • NEW YORK • TORONTO • TORONTO • VANCOUVER  
BAHAMA • BOLIVIA • BRAZIL • CANADA • CAYMAN ISLANDS • CHANNEL ISLANDS • CHILE • COSTA RICA • COUGAR ISLANDS • CUBA • DOMINICAN REPUBLIC • ECUADOR • EL SALVADOR • HONDURAS • JAMAICA • MEXICO • NICARAGUA • PANAMA • PUERTO RICO • THAILAND • TRINIDAD & TOBAGO • VENEZUELA • URUGUAY

© 1983 THE FIRST NATIONAL BANK OF BOSTON

## EUROPEAN NEWS

**West Berlin fears over Turkish match**

BY OUR BERLIN CORRESPONDENT

THE WEST Berlin authorities have mounted a massive security effort to prevent right-wing extremists from inciting hatred against the 140,000 Turks living in the city during today's football match between West Germany and Turkey.

Police raided the apartments of 42 neo-Nazis last weekend and confiscated leaflets which called on German fans to "wipe up the stadium seats with the Turkish swine" and worse. Border police are carefully checking motorists entering the city if they are suspected of carrying weapons and of wanting to promote a clash with the Turks.

The police commissioner warned that suspected troublemakers would be taken into protective custody today. About 6,000 West Berlin police have been mobilised to patrol the area around the football stadium and the Turkish district.

The governing mayor of West Berlin, Herr Richard von Weizsäcker, has called for the match to be a "sports festival of friendship." He has long called for the match to be a "sports festival of friendship."

He has long called for the match to be a "sports festival of friendship." He has long called for the match to be a "sports festival of friendship."

The authorities are also worried about reports that Turkish groups plan to use the football game to express their opposition to the Turkish military regime. Turkish interpreters for the police will be at the entrances to the stadium to stop any Turks from carrying in placards protesting against the Government in Ankara.

The Turkish press is watching the match closely. Reports of growing discrimination against Turks in West Germany are a frequent news item in Turkey.

**Ireland reduces deficit**

By Brenden Keenan in Dublin

A MARKED improvement in Ireland's balance of payments deficit will prove temporary unless action continues to curb public spending and restore competitiveness, according to the Irish central bank's quarterly report.

The bank says it expects the balance of payments deficit this year to be about £320m (£324m), equivalent to 2½ per cent of gross national product (GNP). It describes the improvement from 14 per cent of GNP in 1981 as remarkable.

However, the bank expects an increase in imports, a rise in oil and commodity prices and accumulating debt servicing charges to put pressure on the balance of payments.

The bank expects inflation to rise to over 11 per cent by the end of the year.

**Christian Democrat Party seeks to resolve its future**

BY JAMES BUXTON IN ROME

THE FUTURE of Italy's long-ruling Christian Democrat Party, which suffered a severe setback in the general elections last June, should be resolved at a congress brought forward to next February.

The key issue will be the position of Sig Ciriaco De Mita, the party secretary, who is held responsible for the election failure by several factions of the party. The Christian Democrat share of the vote fell to 32 per cent, its lowest since the Second World War.

The party, which is always faction-ridden, has been in disarray since June. It has shown unease at being in coalition under the Prime Minister of the Socialist Party leader, Sig Bettino Craxi. Many Christian Democrat deputies either did not vote or voted against the

Government on a key part of the 1984 budget, causing a Government defeat.

Sig De Mita, who upheld a policy of economic "rigour" and strongly opposed the Socialists during the general election campaign, proposed an early party congress at a meeting of the party's national council this week.

The outcome of the congress, assuming it goes ahead in February, is still uncertain. But in his address to the national council Sig De Mita was careful to strike a conciliatory note. He renewed the party's support for Sig Craxi, avoided many contentious issues, and blamed many of the problems of Italian institutions.

**SOVIET MISSILE PLANS CRITICISED****Romania warns on arms**

BY ANTHONY ROBINSON IN LONDON AND LESLIE COLITT IN BERLIN

SOVIET PLANS to start preparations for development of new tactical missiles in East Germany and Czechoslovakia were obliquely criticised by Romanian President Nicolae Ceausescu yesterday. In an interview with the Egyptian newspaper Al Ahram, Mr Ceausescu called on the Soviet Union to stop deployment of new rockets and even pass... to the reduction of a certain number of existing rockets" and to the realisation of an agreement."

This is not the first time that both American and Soviet missile deployments.

Last Saturday, nearly 100 East Germans were taken into custody for planning a peace rally on East Berlin's Alexanderplatz timed to coincide with the massive peace rally taking place in West Germany.

In recent months, dozens of anti-nuclear campaigners from Jena, a centre of the East German peace movement, have been stripped of their citizenship and sent to West Germany against their will.

**Helsinki talks planning begins**

BY ANTHONY ROBINSON IN LONDON

PREPARATORY WORK began yesterday in Helsinki for a long-mooted European disarmament conference scheduled to begin in Stockholm on January 17.

Diplomats from all 35 countries from East and West who participated in the Conference on Security and Co-operation in Europe (CSCE) met to fix an agenda and ground rules for the full conference which will discuss East-West military confidence-building measures.

Its aim is to seek agreement from 33 European countries, plus the U.S. and Canada on the extension of confidence-building measures aimed at reducing the risk of a surprise attack by either side in Europe.

Diplomats met against the unproven background of imminent Nato moves to deploy U.S. cruise and Pershing 2 missiles in Western Europe and countervailing Soviet moves to start preparations for deployment of more accurate and

longer range missiles in East Germany and Czechoslovakia.

Agreement in holding the forthcoming Stockholm Conference on Confidence and Security Building Measures and Disarmament in Europe was reached last month at the conclusion of the two-year European Security Conference follow-up meeting in Madrid.

Discussions at Stockholm is likely to centre on measures aimed at further reducing the risks of surprise attack by lowering the ceiling on troop involvement.

The conference agenda will not cover arms control or reductions.

Western diplomats fear that the Soviet Union will be tempted to use the Stockholm conference as yet another platform from which to attack Nato plans for cruise and Pershing 2 deployment.

To start with, you could sip your way through a variety of tempting cocktails, shaken or stirred at our tropical poolside bar.

Then on into Diamond Li's, our authentic 150 year old wild west saloon.

Where dancers, singers and comedians entertain in our twice nightly show. And where you can try one of our famous charcoal grills.

Or, in contrast, you could dine in the tranquility and stylish atmosphere of our French restaurant. In fact, The Colony Room boasts a reputation for excellent cuisine, friendly service and an extensive wine list.

(All of which, incidentally, you can enjoy even if you are not staying at the Skyline).

So, it's hardly surprising you'll be reluctant to turn in for the night.

But, of course, when you do, you'll find we've put the same effort into providing your room with every comfort.

**At our hotel, it's the last thing you'll want to do.** Sheraton Skyline Bed, yes. Bored, never.

BATH ROAD, HAYES, MIDDLESEX. TEL: 01-759 2535.

**Putting on the Ritz all the way to L.A.**

AIR NEW ZEALAND'S RITZ OF THE SKIES SERVICE TO LOS ANGELES AND NEW ZEALAND ONCE AGAIN CAME TOP IN THE LUNN POLY BUSINESS CLASS SURVEY.

## OVERSEAS NEWS

## AFTERMATH OF BEIRUT BOMBING



Night search: Rescue teams amid the devastation in Beirut

## Soviet fury over U.S. claims

BY ROGER MATTHEWS.

THE SOVIET UNION has reacted angrily to U.S. suggestions that Syria and Iran may have been implicated in the Beirut bombings which cost the lives of more than 200 American and French troops.

The daily newspaper Pravda claimed yesterday that the allegations formed part of a campaign of military provocation directed against Syria. "Syria was not mentioned accidentally," claimed Pravda.

"That country is an obstacle when the road of American and Israeli plans in the region."

The Soviet Union has thousands of troops and technicians stationed in Syria to act as military advisers and to operate the relatively sophisticated Sam-5 and SS-21 missile systems.

After the severe military setbacks suffered by Syria at the hands of Israel during the

invasion of Lebanon last summer, the Soviet Union has not only replaced lost Syrian equipment but has improved the quality of its supplies.

The Syrian Government is said to be confident that the Soviet Union would become directly involved if Israel mounted attacks within Syrian territory.

Israel television news gave prominence on Monday to what it claimed was the continuing arms build-up in Syria.

Pravda argued that the U.S. had kept silent about the fact that "the whole situation in Lebanon is the result of the Israeli invasion which was undertaken with the full support of the Reagan Administration."

The appearance of American troops in Lebanon is a continuation of the occupation policy which the Reagan Administration conducts along with

Israel." Although concentrating on the perceived U.S.-Israel threat to Syria, Pravda also said that accusations of Iranian responsibility for the Beirut bombings was part of a larger American design. "It is no surprise when U.S. and British naval units are waiting off the shores of Iran," said the Communist Party daily.

Relations between Moscow and Tehran have deteriorated sharply during the past three years but the Soviet Union may now sense an opportunity for an improvement if there is an escalation in the Gulf War.

Iran has threatened to shut the Strait of Hormuz if its own oil exports are put in danger. If the U.S. sought to reopen the waterway in defence of its own vital interests, some diplomats believe Iran might have little option but to mend its fences with Moscow.

## Jordanian envoy wounded in New Delhi

By Our Middle East Staff

JORDAN'S ambassador to India was shot and seriously wounded in New Delhi yesterday. Mr Mohammed Ali Kourne, a career diplomat who took up his post three months ago, was hit several times by an unidentified gunman firing from close range.

Jordanian officials said they could not understand the attack. However, King Hussein of Jordan has been bitterly criticised by more radical Arab states and by Palestinian guerrilla factions for his willingness to co-operate with President Reagan's Middle East peace proposals.

The virtual collapse of Mr Reagan's plan and the deteriorating security situation throughout the Middle East has led to fears that diplomatic efforts may be given way to more violent tactics.

Jordan has also been the most vigorous supporter of Iraq in this three-year war with Iran. King Hussein was the first Arab head of state to visit Baghdad after the outbreak of hostilities and allowed Aqaba port to be used for the transit of Iraqi war supplies.

The split within the ranks of al-Fatah, the largest guerrilla faction in the Palestine Liberation Organisation, has brought to greater prominence men who were strongly opposed to bringing King Hussein into negotiations.

Israel argues that the Palestinians already have a homeland in what is today Jordan. The last attack on an Arab diplomat in New Delhi was in June, 1982 when a first secretary at the Kuwait Embassy was shot dead in alleged retaliation for the death of Palestinians living in Kuwait. It has become, in effect, some-

## China plans to use 'economic levers'

BY MARK BAKER IN PEKING

CHINA PLANS to make greater use of selective taxes, interest rates and pricing policies to speed the growth and modernisation of its economy.

The assistant general secretary of the State Council, Mr Yuan Ma, said that wider use of Western-style "economic levers" was important in helping China to achieve its target of quadrupled production by the year 2000.

Mr Yuan said China was proceeding with plans to switch state enterprises from the traditional system of profit delivery to more flexible taxation of revenue as a way of stimulating productivity.

In addition, taxes would be regulated to restrain production of over-supplied com-

modities and to stimulate production of scarce items.

He said a system of "floating" interest rate would be expanded to free up more funds for projects which were favoured by the state.

Mr Yuan said also that there would be more opportunity for market forces to influence prices. The state would relax pricing controls on more commodities and would support higher prices for higher quality.

The state decision to increase prices for agricultural products had spurred production and added about \$25bn to the incomes of peasants from 1979 to 1981.

Mr Yuan said that China recognised the need to follow the experience of other

countries and promote growth through incentives.

We regard the present economic reforms as a profound revolution. We have to do away with many traditional ideas, customs and forces of influence," he said.

But he added that China had to be careful to adapt foreign economic skills to its own circumstances and not undermine its fundamental Socialist principles.

Mr Yuan said that since China began reforming its economy in 1978, the gross output of agriculture had increased by 7.5 per cent a year, while gross industrial output had risen by 7.3 per cent a year. There had been similar improvements in trade and commerce.

No such emphasis would be put on promoting individual enterprise, giving greater management freedom to state-owned enterprises and generally allowing the market to regulate the economy.

China was also experimenting with more flexible labour and wage policies. This involved allowing more enterprises to engage and dismiss workers as they saw fit and the use of "floating" wage structure to reward skill and efficiency.

AP-DJ reports from Hong Kong: China is considering issuing a freely convertible currency for its special economic zone of Shenzhen which borders Hong Kong, a Hong Kong Communist newspaper said yesterday.

## War of nerves persists in Japan

BY JUREK MARTIN IN TOKYO

MR YASUHIRO NAKASONE, the Japanese Prime Minister, will today try to find a formula to break the deadlock in the Japanese Parliament which has prevailed since former Prime Minister Tanaka was convicted in the Lockheed bribery trial two weeks ago.

He will do so in consultation with Mr Susumu Nakada, the tough secretary-general of the ruling Liberal Democratic Party, who has spent much of the last fortnight rallying the LDP against the concerted opposition attempt to have Mr Tanaka expelled from the Diet.

It is now apparent that the three-cornered confrontation between the LDP establishment, represented by Mr Nakasone and Mr Nakada, its dissident elements, united mostly by distaste for Mr Tanaka, and the opposition, has gone beyond the stage of ritual posturing.

It has become, in effect, some-

thing of a war of nerves, which, on all sides, are becoming more tauntly stretched.

The Government, for example, is finding itself discredited because its substantial legislative agenda is now being held hostage by the opposition boycott of the Diet. This includes the proposed Y1.2 trillion (million million) (\$52bn) tax cut which constitutes a central part of last week's economic package.

It is also becoming embarrassed because it is proving impossible to arrange scheduled speeches to the Diet by Chancellor Kohl of West Germany, who arrives this weekend for an official visit, and President Reagan due in Tokyo on November 9.

But this embarrassment also appears to apply to the opposition whose rare display of unity over the last fortnight could crumble in the face of accusations that it is responsible for presenting a poor image of Japan.

## Liberia seeks \$975m in foreign aid

BERNE—Liberia is negotiating for foreign loans and grants totalling \$975m to finance investment projects and help pay its balance-of-payments deficit. Planning and Economic Affairs Minister Emmanuel Gardiner said yesterday. He said that his government was holding talks this week with 16 countries and 22 international aid organisations, including the World Bank, the International Monetary Fund, and the European Community to try to raise the money. The Liberian economy shrank by 7 per cent last year and growth was also likely to be negative in 1983, the Minister said, adding that it had become impossible to generate sufficient finance domestically to promote investment.

## Saudi Arabia reshuffles Cabinet

BY MICHAEL FIELD

THE SAUDI ARABIAN Government has announced two important ministerial changes affecting the portfolios for Industry and Health.

Dr Ghazi Algosabi, who has been Minister of Industry and Electricity since the accession of King Khalid in 1975 and has managed the Health portfolio for the last 12 months, is now to be Minister of Health only.

His post at the Ministry of Industry is being taken by Abdul-Aziz Zamil, who has been the managing director of the Saudi Basic Industries Corporation (Sabic), the organisation that holds the state's interests in petrochemical and steel joint ventures.

The arrival of Mr Zamil at the Ministry of Industry does

not signify any change in Government policy. The new Minister is as much associated with his predecessor as with the trial cities of Jubail and Yanbu, and even in the last year of low revenues the Government has shown no sign of cancelling or scaling down any of the major projects there.

However, the appointment of Dr Algosabi to work full-time at the Ministry of Health suggests that the Government is anxious to have someone with a reputation for ruthlessness and efficiency to tackle the problem of the Ministry's soaring costs.

When Dr Algosabi arrived at the Ministry of Industry last year he took to patrolling the building early in the morning to see which of his staff were not at their posts.

Dr Algosabi and Mr Zamil have similar backgrounds. Both are from the Nejd (central Arabia), and both belong to well-known trading families with Saudi and Bahraini members in their ranks and commercial interests in both countries.

Eight of Mr Zamil's 11 brothers run the highly successful family company, known as the Zamil group.

The company has been one of the Kingdom's most enterprising investors in light industrial projects, with interests in air-conditioning, manufacturing, food processing, pre-engineered steel buildings and aluminium door and window frames.

## Strike averted at gold mines refinery

By J. D. F. Jones in Johannesburg

A STRIKE by the black workforce at the Rand Refinery in Germiston, which processes the output of South Africa's gold mines, was averted at the last moment late on Monday night when the new National Union of Mineworkers accepted a revised offer from the Chamber of Mines.

The union had carefully gone through all the processes of the dispute machinery and the strike, which was expected to start yesterday, would have been only the second legal strike by black workers in the period. South African labor relations experts say that the miners had originally asked for 40 per cent.

Although white employees at the refinery would have carried on working, there had been concern about the implications of a prolonged strike for the gold mines. It had been made clear that gold would, if necessary, have been released from the Reserve Bank's reserves.

The settlement of the dispute is a further stage in the learning process between the Chamber of Mines and the mineworkers' union.

The union, under the leadership of Mr Cyril Ramaphosa, was only recently recognised by the chamber in June, but has since made rapid progress.

For further information:

contact your travel agent or ring American Airlines on 01-629 8817.

## Hardline Muldoon heads off public sector unrest

By DAI HAYWARD IN WELLINGTON

A HARDLINING attitude on the part of Mr Robert Muldoon, the New Zealand Prime Minister, has forced state-employed electricity generating workers to call off a series of disruptive meetings which were due to start yesterday.

When the 1,200 electricity workers, who are members of the Public Services Association (PSA) planned four two-hour meetings which would have cut generating capacity by 25 per cent, Mr Muldoon introduced legislation to remove recognition of the association.

This would have left the 69,000 state employees without a trade union, with no negotiating rights and their assets taken over by the state.

The workers first refused to back down on Monday, and Mr Muldoon announced that he would introduce wide-ranging emergency provisions allowing for 40 per cent.

Although white employees at the refinery would have carried on working, there had been concern about the implications of a prolonged strike for the gold mines. It had been made clear that gold would, if necessary, have been released from the Reserve Bank's reserves.

The settlement of the dispute is a further stage in the learning process between the Chamber of Mines and the mineworkers' union.

The union, under the leadership of Mr Cyril Ramaphosa, was only recently recognised by the chamber in June, but has since made rapid progress.

For further information:

contact your travel agent or ring American Airlines on 01-629 8817.

## Uranium go-ahead sought

By MICHAEL THOMPSON-NOEL IN SYDNEY

THE South Australian State Parliament yesterday demanded the go-ahead for the AS1.5bn (f1bn) Olympic Dam copper-gold uranium find at Roxby Downs. The move came despite signs that the Federal Labor Government in Canberra is contemplating another inquiry into the project as a means of placating fierce Left-wing opposition to uranium mining and exports.

Olympic Dam is thought to contain at least 1.2m tonnes of uranium—the world's biggest find—and has been a political football almost since its dis-

covey.

"As far as Roxby Downs is concerned, we have had enough inquiries," said Mr John Bannon, South Australia's Labor Prime Minister.

Federal Labor policy calls for a full winding down of the uranium industry, though there is a last-out clause that exempts finds like Olympic Dam, where uranium occurs with other minerals.

The uranium controversy was discussed by the Federal Cabinet yesterday, but no decision is expected until at least next week.

## BUGGED? THE COUNTER SPY BRIEFCASE

By DAVID MCKEE

NOTICE TO HOLDERS OF  
W. R. Grace & Co.  
BEARER SECURITIES

Copies of the Annual Report of  
W. R. Grace & Co. can be obtained on request from:  
F. J. Brennan  
Treasurer  
W. R. Grace & Co.  
1111 Avenue of the Americas  
New York, NY 10036  
U.S.A.

BUGGED? THE COUNTER SPY BRIEFCASE

By DAVID MCKEE

NOTICE TO HOLDERS OF  
W. R. Grace & Co.  
BEARER SECURITIES

Copies of the Annual Report of  
W. R. Grace & Co. can be obtained on request from:  
F. J. Brennan  
Treasurer  
W. R. Grace & Co.  
1111 Avenue of the Americas  
New York, NY 10036  
U.S.A.

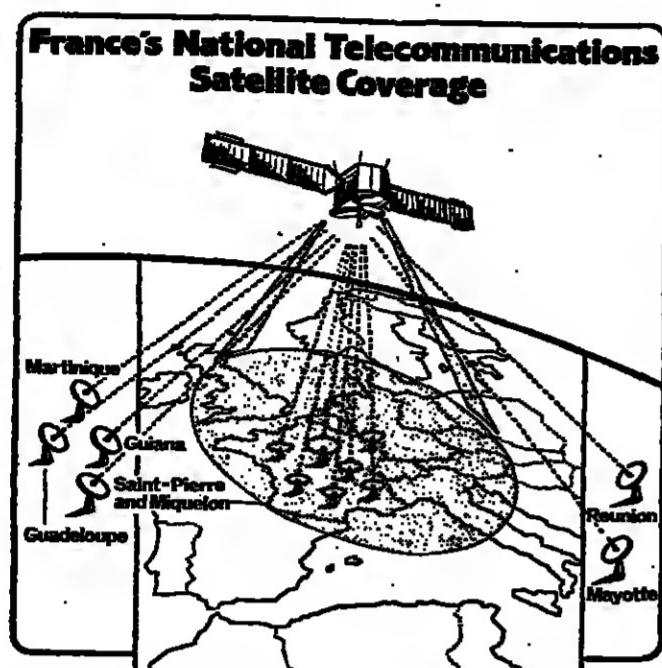
## TECHNOLOGY

EDITED BY ALAN CANE

## SPACE COMMUNICATIONS

**France demonstrates satellite system**

BY ELAINE WILLIAMS



In 1984 France will launch its first national satellite called Telecom 1. Today at the international telecommunications exhibition, Geneva '83, the French telecommunications authority will carry out a series of demonstrations to show the type of services its future satellite will provide.

The experimental Orbital Test Satellite, OTS, will be used in this week's demonstrations which will show electronic mail transmission, freeze-time teleconferencing, and broadcasting.

These are some of the services which will be provided by Telecom 1 following its launch by the Ariane rocket system. The satellite, and a spare, will provide digital communications within France and telephone links to overseas territories and allow French television broadcasts to be received in these

countries.

The area of coverage includes Guiana, Martinique, Guadeloupe, Saint-Pierre et Miquelon, Réunion and Mayotte. At the present time the telephone and television services between these countries and France are provided by the Intelsat and Symphonie satellites. Telecom 1 will replace some of these.

The French telecommunications authority says that the main characteristic of the new service is the wide range of data rates from 2,400 bits per second to 2 bits/second for video conferencing. It is hoped that these services will be used by industry and commerce.

As a first stage of the future French video-transmission network, a video channel is to be reserved, a video channel will be reserved for this purpose.

## COMPUTER PERIPHERALS

**Company start-up**

TINY DISKS which can store vast amounts of data and sit inside, rather than alongside a personal computer are fast becoming the rage—Californian start-up Microcomputer Memories is now giving our own Rodime competition.

Storage of between 6.35 and 12.7 megabytes of data on a unit which is so small that it

can fit on to a person's hand, has been made possible by the three and a half inch hard disk which it contains.

Two twin-sided rigid disks with capacity forty fold greater than floppy disks have been squeezed into a unit which is nearly six inches high, four inches wide and just over one and a half inches deep.

We have the drive to handle it all

**fluid power products**

from Renold distributors worldwide  
Renold House, Wythenshawe, Manchester  
061-437 5221

**BANKING SYSTEMS  
THE SPIRIT OF COMPETITION**

Competing in today's challenging financial environment, banks must be able to plan and react quickly. Financial institutions feel it is now vital to offer new products to suit market pressures, to position themselves properly within their chosen markets and to be able to monitor and achieve required profitability. However, traditional computer systems are not providing the flexibility required to enhance or even maintain the competitive edge that these institutions are entitled to demand.

Hogan Systems has recognised the need for performance and flexibility in the future and is introducing a family of revolutionary software products designed to meet the

requirements of banks and other financial institutions preparing for competition in the 80's.

Hogan's software system is a fully integrated solution to large scale financial data processing needs, addressing all areas of loan processing, deposit processing, current account processing, financial modelling, profit maximisation, profitability analysis/forecasting and marketing analysis.

With Hogan Systems, banking services can evolve to compete at the pace demanded by a changing financial world... throughout the world.

**TOMORROW'S SOFTWARE.  
HERE TODAY.**

Chesham House 150 Regent Street London W1R 5FA  
Telephone: 01-439 6288

**Communications**  
**Text and data seminar**

A growing number of options are facing the corporate communications manager who is tasked with optimising the use of leased lines and the public networks in terms of voice, data and text transmission, both on-site and between sites.

The integration of voice and data is to be looked at in a one day seminar organised by Oyze Scientific and Technical Services in London on December 6, when some of these options — independent circuits, packet switching, the new digital PBXes, for example — will be examined by experts from industry, consultancies and British Telecom.

Chairman will be Mr R. Camras, who looks after telecommunications practice at Arthur D. Little. The venue will be The Rainbow Suite, London, W.E., and the fee is £125. More from Suzanne Mayhew on 01-236 4086.

**Lighting****Thorn-EMI to double production**

THE SUCCESS of Thorn-EMI Lighting's miniature folded fluorescent tube, the "2D," which was introduced in 1981 and is now being made at the rate of 1m units a year, can be judged by the fact that the company plans to inject film in order to double production at the Enfield plant in North London.

The lamp, which uses only 16 watts but produces nearly as much light as a 100 watt filament lamp, is several times more expensive but over the long life considerable savings can be made and Ray Everett, production director, thinks that an increasingly energy-conscious community is beginning to read the message. "The steadily increasing demand more than justifies the heavy capital investment we are putting into the factory," he says.

Advanced production machinery is part of the secret, allowing the lamp to be made at high speed and acceptable cost, but the process does not without its problems. For example, the double bend in the half-inch glass tube meant that it had to be given its phosphor coating before it was bent. So special adhesion techniques needed developing before mass manufacture was even contemplated.

To date the 2D has produced £5m of turnover for the company, a third of it in overseas sales. Some 200 manufacturers have designed fittings round it.

**BRITISH RAILWAYS LOOKS AT WAYS TO ENTER COMPUTER BUSINESS****B.R. makes computer tracks**

BY PAUL WALTON

THE BRITISH Railways Board has begun looking at ways of getting into the computer business. It plans to market its mainframe programming skills and may retail personal computers.

It believes it would get the political backing needed to change the Transport Act, so it could run its very large (250m-a-year spend) Computing Systems and Services (CSS) division as a commercial operation. A business plan will be presented sometime during 1984. The Board threw open its data processing (dp) contracts two years ago and has forced CSS to compete for work on which it used to have a monopoly.

Mr Otto Benz, head of the CSS division, said it had become both a profit centre and more relevant to the business world:

The five internal BR shops have made a small profit of some £20,000 after 30 months on the sale of about 400 machines.

"On the one hand I welcome competition because it improves CSS; on the other hand I am fighting it for work and for revenue."

A commercialised CSS would become one of the UK's top half dozen computer service companies, overnight matching Logica, Thorn-EMI and Hoskyns with its 750 computer staff.

The Board would become one of only a handful of public sector giants to follow private firms in commercially exploiting computer services primarily developed for internal use.

The National Coal Board was the first, creating the Compower service arm from its dp service in 1973. British Leyland followed suit several years later, with BL to sell and support personal computers.



British Rail is using the wide experience of computers in train control and design to sell services and systems to business and industry

Many other large organisations have made the same move to counteract managers who were buying a dizzy array of largely incompatible machines out of petty cash.

The five internal BR shops have made a small profit of some £20,000 after 30 months, on the sale of some 400 machines including the Superbrain, the ACT Sirius and the IBM Personal Computer.

Both the profit margin and the turnover of these shops is now rising fast. Mr Benz pointed out: "With the possibility that sales might treble, and that the profit margin would rise nearly £100,000 annually might be made from the internal sale of the machines, as well as the software and peripherals which go with them."

One scheme being canvassed is to see the Board taking this operation (in London, Reading, Crewe, Nottingham and Darlington) into the high street, using the extensive shop frontage which BR has in stations and booking offices.

"This is something which we

were some similarity between the NCB and BR dp operations. He said that his company's £4.7m profit last year was up 15 per cent, on a turnover of some £25m.

A quarter of this work was for external customers largely buying computers as a business service. He added that selling software was fast becoming the "dominant" portion of the business outside the NCB.

Mr Benz agreed that selling software skills is the most profitable computer service to offer, and said that CSS might skip the "declining bureaux

"We have more experience than most other organisations in the use of large numbers of microcomputers, for instance, in the development of networked systems."

service and jump straight forward to become a programming house in the mould of Logica.

"We have more experience than most other organisations in the use of large numbers of microcomputers, for instance, in the development of networked systems in linking them to mainframes, or in tailoring the software to do anything from CAD/CAM to office automation," Mr Benz said.

The final word rests with the Board, which will soon be casting an eye over the CSS business plan, aided by its first director of Information Systems and Technology, Mr David Cobbett, recently appointed to oversee computing at BR.

**MORE  
LIVE CONTACTS.  
FEWER  
DEAD ENDS.**

*'That's the difference'*



With fast communications, we can make effective cash management a reality. With 18 currency dealing centres covering the world 24 hours a day, we can offer you some remarkably professional and competitive dealing.

And with the rest of our services, developed over 130 years' specialisation in financing international trade, we can offer you a practical and profit-orientated approach to overseas business that will match your own.

Discover the difference. Call any Standard Chartered Bank branch for details.



**Standard Chartered**

**Direct banking, worldwide**

Head Office: 10 Clements Lane, London EC4N 7AB.

## THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ

**THE QUESTION** is: where should manufacturing concentrate their greatest effort? Maurice Glynn, chairman and chief executive of American Can UK subsidiary, has no doubts. "Money is made on the shopfloor. The quality and competitiveness of your manufacturing is where you get the edge."

American Can (UK) is a case study in the way one tool for raising business performance—a comprehensive computerised business control system—has exerted a profound effect on the company from the shop floor to the upper reaches of executive decision-taking.

Installation of an integrated system of computerised manufacturing, distribution and finance and run by a very comprehensive software package has permitted the company to introduce, among other things, a crewing arrangement unique in the UK canning industry for one of its shift systems. Some other can companies with computerised manufacturing systems are moving in similar direction.

It has stripped away from plant managers what Glynn terms "pesky" jobs which hamper the task for which these managers are paid—making cans—married actual output more closely to production forecasts and freed senior executives from much of the day-to-day grind of production management.

Less surprisingly, perhaps, it has contributed to a drop over the past three years in the amount of raw materials held in stock and in work-in-progress from more than 80 days' worth of production to 63 and a more than 40 per cent cut in white collar staff.

But just as American Can provides an example of how the influence of a computerised business system can cascade all the way down to machine maintenance planning and shop-

# How American Can freed managers from the daily grind

Nick Garnett on the impact of a business control system



fully loaded plants, the resulting mess is left for progress chasers to sort out.

At that time in the late 1970s American Can was facing escalation in manpower costs and, the horizon was need to learn the trick of manufacturing with lower raw material stocks in order to save costs. These pres-

## ... and now foresees the day of the Trifid

sures were being exacerbated by market overcapacity and difficult selling.

The computerised business system goes a long way towards resolving some of these conflicts. Putting it in a simplified way all the facts relevant to manufacturing—order levels, inventory, capacity, machine-

making."

It has a long way to go though. Turnover for American Can (UK), including European operations controlled from Britain, amounts to £100m as against the six software systems (each costing up to £50,000) it sold before setting up Trifid.

Employing 1,400 in Britain and with 20 per cent of the home can market, American Can's margins, like those of other can-makers, have been cut in the bone. The sale price of beer and beverage

cans is no higher than it was three and a half years ago.

In the case of American Can (UK), however, diversification into the selling of its computer software—an enhancement of one originated by SMI, a Chicago-based software company, and sold as a whole or in three separate systems, for different business functions—is part of a metamorphosis of its U.S. parent.

The American Can company—based in Greenwich, Connecticut—has forked out

£700m, in the past 18 months, on a restructuring which is one of the largest and most rapid in U.S. corporate history.

At the end of 1981, the group obtained 80 per cent of its revenue from the manufacture and sale of packaging materials. It has subsequently sold its interests in forestry products and used the money to improve its can-making operation and expand its financial services and specialist retailing activities.

American Can claims to be manufacturing to  $\pm 2$  per cent of forecasts which it says gives it greater confidence in the way it loads up its plans. For top management that means taking much of the routine production planning out of their lap giving them more time on company direction.

At the end of the day computers do not negate the general principle that a company's per-

formance largely rests in the hands of its management.

The group, which employs 38,000 worldwide and had revenue of \$1.6bn in the first half of this year, now depends on packaging (mainly can-making) for only one third of its turnover.

The other two thirds are derived either from financial services and from retailing, which includes small store and multiple distribution units.

Now that it is in the business of selling software packages it will find it harder that a development that is designed to improve efficiency of traditional manufacturing will be used by some companies to reduce their dependence on that manufacturing.

The workers fought back. A manual swivel-trad device was given them for use in the early

# Workers fight to control their jobs

**WHAT REASONS** do industrial managers have for introducing computerised management systems into production lines? Purely economic ones, most would say. Efficiency is improved by reliable computer-controlled machines, lower manning levels, and more consistent quality.

The "deskilling" of manual workers, though unfortunate if it occurs, is a by-product.

But is that what they really think? Recent research in West Midlands engineering companies suggests that, behind their rationales of technical efficiency, many managers also use technology as a weapon—in fact, an increasingly effective weapon—to regain control, which they have let slip, over working practices and the pace of output.

Barry Wilkinson, recently of Nottingham University and now lecturer in business administration at the University of Salford, note, describes his research in an article in "Industrial Relations Journal" and in a book.<sup>1</sup> He also provides a fascinating insight into the "subversive and unorganised" ways in which workers try to keep control over their work, often well away from the union negotiating table.

At a metal plating company, automation did away with the manual use of control levers to drop components into vats of zinc, chrome and aluminium. The process became controlled electronically. The three workers per line were cut in two, and their tasks were reduced in loading and unloading.

The results for the change were not purely those of technical efficiency. Management wanted to wrest control over the pace and quality of output from "lazy, unreliable and belligerent" workers who took lots of time off work, took long breaks, and worked slowly, leaving components in vats for longer than necessary.

Instead of leaving the electronic control panels on the machines, the company put them in a room where only managers and one or two engineers were allowed. "The platers can not get at them here," the manager told Wilkinson.

The workers fought back. A manual swivel-trad device was given them for use in the early

stages when the system was being "deskilled". But it soon afterwards and managers had the devil's job trying to stop them. The plant said they could get a better quality finish manually and reduce the scrap rate. They complained that management's standards were shoddy.

A rubber moulding company had a similar problem, but avoided getting its fingers burnt when it introduced a new system. It had working turbines designed in detail by development and process staff in advance, so the system was ready straightforward for full production.

Managers, of course, would argue that these supposedly political acts were at root economic. They were needed to be more productive. But Wilkinson quotes the findings of efficiency using the plater as an example, and he argues that the unmanaged notion that the choice of technology is politically neutral has helped managers avoid having to negotiate over it.

Some of his case studies show the now-familiar battles between blue- and white-collar workers over new equipment. In one machine shop, programmes were supposed to do all the programming and editing, and were employed to find the minimum which doing their own manual programming on conventional machines.

Wilkinson believes this kind of "deskill" among manual workers shows that their skills can be used in a more humane kind of technology. Machines can be Redefined for operators programme: a team at University of Nottingham Institute of Science and Technology is working on just this.

But he recognises that managements are more likely to adopt even more centralised control systems, which threaten the roles of both blue and white-collar workers. One central computer can control several machine tools simultaneously.

"Vol. 14 No. 2, Adult Education Dept, Nottingham University NG7 2RD.

<sup>1</sup> "The Shop Floor Politics of New Technology", Heinemann, 25.95.

Brian Groom

# IF ONLY A SEAT ON THE BOARD WAS AS COMFORTABLE.



For a few precious hours, relax in the privacy of our Business Class Cabin. Here, the only merger you'll face is the pleasant one between you and your seat.

Stretch out in your favourite place, by the window or the aisle, reserved at the time your

secretary made the booking. These exclusively designed seats are wider and with more leg room than you'd expect. Some airlines would be pleased to describe this degree of comfort as First Class.

And as you stretch out and unwind, the

toughest decision you'll probably have to make is whether to imbibe a glass of champagne or a whisky sour. Or to have the Fillet of Sole, the Roast Duck or the Filet Mignon.

Then again, you might simply prefer to adjust your special stereo headphones and

choose from eight music channels offering everything from Brahms to Berman, as you savour a cup of coffee. With our hostesses in sarong kebayas anticipating your needs almost before

SINGAPORE AIRLINES BUSINESS CLASS



دعاكم الصلوة

# You can expect a longer life. But will it be worth living?



1840  
Average life expectancy  
40 years.



1870  
Average life expectancy  
41 years.



1920  
Average life expectancy  
56 years.



1980  
Average life expectancy  
70 years.

Source: Office for Population, Censuses and Surveys

140 years ago, it was a lucky man who lived to see his grandchildren.

Nowadays, you'll probably live to see them happily married.

Much of this change can be attributed to the achievements of medicine.

But there's another side to the coin.

Because we're living longer, diseases of old age are on the increase.

So, too, are stress-related diseases caused by the pressures of modern life.

At Hoechst, we're aware of these problems. More to the point, we're helping to solve them.

### Making life worth living.

One area where we've concentrated our efforts is the therapy of cardiovascular diseases.

Our most recent development being a drug that improves the blood flow through the vessels.

It's already making life a lot more bearable for victims of circulatory disorders.

Depression is one of the most common – and least understood – of twentieth century ailments.

We now recognise it's as much a matter of biochemistry as state of mind.

As a result, we've been able to develop new anti-depressants that can actually restore the desire to lead a full and active life.

### The price of success.

Discoveries like these require huge resources, both human and financial.

Last year, we spent £156 million on pharmaceuticals research alone.

Any new line of research has only an 8000:1 chance of success.

Currently we employ 13,000 people in fifteen different countries on our research programme.

Working in areas as diverse as health, communications, energy and nutrition.

What they're all trying to do is make life more worth living for everyone.

### We're spending £1 million a day on a better tomorrow.

## THE INVASION OF GRENADA

# Reagan went against Thatcher's advice on invasion

BY IVOR OWEN

PRESIDENT RONALD REAGAN went against the advice given him by Mrs Margaret Thatcher, the British Prime Minister, who was ordered U.S. forces to participate in the invasion of Grenada, the British House of Commons was told yesterday.

It was the PM herself who revealed that in a telephone conversation with the President late on Monday she stressed Britain's "very considerable doubts" about the initiation of such an operation.

She told MPs that she had asked the President to "weigh carefully" several points which she had raised before taking any irrevocable decision to act.

The PM stopped short of an outright condemnation of the action taken by the U.S. as did Sir Geoffrey Howe, the Foreign Secretary, who wilted under a barrage of Opposition criticism and some barbed questions from the Government backbenches.

His clumsy and embarrassed balancing act as he sought to avoid giving a direct answer when repeatedly challenged to say whether Britain approved or disapproved of the U.S. action clearly made his senior Cabinet colleagues and many Tory backbenchers most uncomfortable.

Sir Geoffrey repeatedly emphasised that the need to protect American citizens in Grenada—they outnumber British citizens by five to one—had been the first and foremost reason for the U.S. intervention.

Mr Denis Healey, Labour's "shadow" Foreign Secretary, who protested that President

UNITED NATIONS—Nicaragua yesterday asked for an urgent meeting of the Security Council to consider the United States military action in Grenada, UN official sources said.

They said the council members would meet privately yesterday night.

Secretary General Javier Perez De Cuellar in a statement expressed "grave concern" over the landing. He said he was "particularly disturbed over the possibility that the escalation of tensions could further complicate an already complex situation in the value of the Anglo-U.S. alliance."

He urged the PM to learn the lesson that no undertaking which might be offered by the U.S. either to the use which might be made of nuclear missiles located in Britain or as to the consultations which would precede their use could be relied upon.

Mrs Thatcher insisted that at no time had the U.S. given an undertaking that it would not intervene. She refused to accept that any parallel could be drawn between the events in the Caribbean and the conditions governing the deployment of U.S. nuclear weapons in Britain.

At one point, he admitted not knowing the whereabouts of the British Governor General of Grenada, and his ineffective retort when Mr Andrew Faulds (Lab, Warley East) dismissed the U.S. Administration as "ignorant business men led by a President who is a dangerous credit." He added to the unease on Government benches.

Sir Geoffrey later told Mr Faulds that "as a most distinguished actor" himself he was in no position to criticise the



President Reagan announcing



the invasion with Dominican Prime Minister Eugenio Charles

Reagan had "walked all over" the British PM, led an unmitigating onslaught on the Foreign Secretary whose increasingly unhappy performance brought repeated shouts of "resign" from the Opposition benches.

The Prime Minister also underlined the fact that the views of a number of other Caribbean states had "weighed very heavily and conclusively" with the U.S.

She acknowledged that the states in the area "undoubtedly see things in a much different perspective from that which we do." Mrs Thatcher pointed out that some of the states had contributed to the forum which had intervened in Grenada.

Anthony Robinson adds: The Soviet news agency Tass

attacked the U.S.-led invasion of Grenada as "imperialist intervention" aimed at "putting a stop to the revolutionary process in Grenada and again subordinate it to neo-colonialist rule." It described participation of forces from other Caribbean nations as a "flagrant to cover the U.S. intervention."

In London, Mr George Arbatov, head of Moscow's U.S. and Canada Institute and adviser to the Soviet leadership commented: "Although some difficulties with the Grenada regime themselves, the U.S. has taken advantage of the situation to pursue its imperialistic plans." Mr Arbatov was speaking at a press conference to launch his book "Cold War or Detente?"

Without even mentioning Grenada, the statement added: "The Soviet Government resolutely condemns the aggressive U.S. course with respect to Nicaragua... interference in Nicaraguan affairs must stop."

Meanwhile in Paris, the French Communist Party called the invasion of Grenada "a crime against international law, against the independence of peoples" and said the U.S. was taking advantage of an internal tragedy to impose its regime on the Grenadian people.

But an official Government statement issued by Tass revealed the Soviet Government's concern over the latest events in Grenada might precipitate further difficulties for its ally Nicaragua. "The Nicaraguan people are threatened with outright invasion by U.S. forces," the statement said.

Without even mentioning Grenada, the statement added: "The Soviet Government resolutely condemns the aggressive U.S. course with respect to Nicaragua... interference in Nicaraguan affairs must stop."

About \$2m remains to be spent in Grenada from a \$3m five-year EEC aid programme ending in 1985.

## Caricom members differ over purpose of action

Differences emerged yesterday between members of the 13-nation Caribbean Economic Community (Caricom) and the United States over their interpretation as to the purpose of the invasion of Grenada, Caricom James writes.

The Prime Minister of Dominica, Mrs Eugenia Charles, chairman of the Organisation of Eastern Caribbean States, said: "We have to ensure that an interim Government is established in Grenada made up of good administrators who can put Grenada back on the path

towards democracy so elections can take place as soon as possible."

Her statement was at odds with President Reagan's explanation that the invasion was intended to protect the 1,100 Americans in Grenada. There is no indication as to how long the multi-national force will remain in Grenada. It is to clear the way for a civilian government and elections. It will have to remain much longer than the one week which the heads of the U.S. armed forces have suggested.

## Countdown to invasion

Feb. 7, 1974: Grenada becomes independent from UK.

March 13, 1979: "People's Revolutionary Army" led by Mr Maurice Bishop takes over power while Prime Minister Sir Eric Gairy is abroad. Two people killed in the coup.

March 23, 1983: Mr Bishop puts armed forces on alert, saying he has discovered U.S.-backed plot for attack on Grenada. Cuba and Nicaraguan exiles operating from an island a few miles away.

Oct. 13: Mr Bishop placed under house arrest.

Oct. 14: Official radio reports Deputy Prime Minister Bernard Coard's resignation because of rumours he had plotted to kill Mr Bishop. But in other reports Mr Coard, a radical hardliner, is said to have taken power.

Oct. 17: General Hudson Austin, the Army chief, says Mr Bishop has been expelled from the ruling New Jewel Movement for refusing to share power with Mr Coard and for having disgraced the revolution. He denies there has been a military takeover.

Oct. 20: Cuba condemns killing of Mr Bishop, says it had no part in upheaval but leaves door open for those relations.

Oct. 21: Military rulers say island is in danger of attack. U.S. task force of 2,000 marines led by aircraft carrier Independence heads for region for possible evacuation of 1,000 Americans. Whereabouts of Mr Coard remain mystery.

Oct. 24: Rulers relax curfew, pledge to form civilian Government. U.S. marines arrive in Barbados.

Oct. 25: Grenadan authorities say island under invasion. President Ronald Reagan announces U.S. forces joined by troops of six Caribbean countries had invaded to restore democratic institutions.

Reuter

## Total eclipse for Bishop's New Jewel Movement

FOR OVER a year before his execution last week, at the hands of his own army, Mr Maurice Bishop, Grenada's Prime Minister, regularly warned his small nation of 110,000 people that the United States was on the point of invading the island. President Reagan, he believed, wanted to squash the important pretensions of a left-wing enclave in Brazil's back yard.

The warning cry served to rally support for a regime which had by then lost most of the public support it had had when it seized power in March 1979. The external threat also served as a convenient excuse to put off persistent demands for a return to constitutional democracy.

The invasion of Grenada by a mixed force of U.S. troops and units from Grenada's neighbours in Caricom—the Caribbean Economic Community—will abruptly halt the People's Revolutionary Government.

Grenada is the most southerly of the Windward Islands. It is a 324 sq km hilly island densely covered in tropical forest and criss-crossed by atrocious roads. It embraces several tiny island dependencies.

More densely inhabited than most of its neighbours, the population pressures have traditionally been eased only by emigration. As much as a third of the population is believed to be resident abroad, mostly in oil-rich Trinidad and Tobago, or else in Britain.

The economy is based heavily on the export of three agricultural crops: cassava, bananas and nutmegs—the latter giving Grenada its nickname of the Spice Island. Great, the British company, is the monopoly buyer of the banana crop.

After independence from Britain in February, 1979 the island was ruled by the eccentric and uncompromisingly dictatorial Sir Eric Gairy, a man much more interested in Unidentified Flying Objects than he was in the island's wellbeing. The Queen is still represented in Grenada by a Governor General, Sir Paul Scoon.

The New Jewel Movement of Maurice Bishop and Bernard Coard—a band of left-wing, mainly London-educated idealists who spent some time hiding out in the northern forests—did not need to do much to take over. Their almost bloodless coup was managed through smuggling visits in old oil drums onto the island.

Under Bishop, Grenada moved rapidly to cement closer ties with Cuba, believed to have been the inspiration behind the takeover. Cuban financial and technical assistance has been extensive, particularly in the connection with the building of a badly needed international airport and in training the country's 1,000 man defence force.

A 576m airport with its 9,000-foot runway, due to be opened next March, was regarded with grave suspicion in Washington. U.S. officials publicly described Grenada as a "stationary aircraft carrier" for Cuba and the Soviet bloc—a charge never convincingly established despite the large embassies both Cuba and the Soviet Union had set up not far from the airport.

Andrew Whitley

## First active military adventure for Caricom

By Connie Jones in Kingston, Jamaica

THE INVOLVEMENT of troops from members of the Caribbean Economic Community (Caricom) in yesterday's invasion of Grenada represents the first active military adventure for the 13-member organisation and is likely to profoundly change its future outlook.

The Community has been split on the issue of military intervention, and diplomats in the region say those who have been against the move may reconsider their membership.

The Community was created 10 years ago from what was the Caribbean Free Trade Association. CFTA had been formed five years earlier and comprised the region's English-speaking countries—all former British colonies and some existing colonies—stretching from Belize in Central America through the Caribbean archipelago to Guyana.

In the past decade, the Community has confined itself to fostering trade and functional co-operation between its members. Preferential access is granted for goods traded between members, with trade being based on a range of light manufactures such as garments, processed food and industrial chemicals.

The countries of the Community also co-operated in air and sea transportation, meteorology, agriculture, health and education. They adopted a joint approach in trade negotiations with the European Economic Community and, more recently, with the U.S.

The Community has had its internal political differences, but so far these have been contained without threat to membership.

Mr Forbes Burnham, the President of Guyana, has not been regarded favourably by his colleagues because of alleged violations of human rights. Similar criticisms were levelled at Mr Maurice Bishop, the Prime Minister of Grenada, executed last week.

With a population of 45m, the community made unsuccessful efforts to include the Dominican Republic and Surinam as its first non-English-speaking members.

The Organisation of Eastern Caribbean States, which made the request for foreign assistance for the invasion of Grenada, which was suspended as a member last week, was formally created last year to give a greater voice in Community affairs to the six smaller islands in the area. These states made the request for assistance because they felt threatened by events in Grenada.

Some members of the OECS signed an agreement eight months ago for military co-operation. They were motivated by the growing militarisation of Grenada as well as by suspected plots to overthrow the Government of Dominica.

Yesterday's invasion will clearly force some members, Guyana in particular, to reconsider their position to the Community.

The invasion was condemned by President Burnham who refused over the weekend to join other countries in planning it. Mr Burnham said instead that he would send his troops to protect the integrity of Grenada if there was an invasion by foreign forces.

The leaders of Trinidad and Tobago and the Bahamas did not support military intervention but are not likely to take any drastic action regarding their membership of the Community.

## OTHER AMERICAN NEWS

### Feldstein warns of deficit effect

BY STEWART FLEMING IN WASHINGTON

MR MARTIN FELDSTEIN, chairman of the Council of Economic Advisers, warned yesterday that surging U.S. trade deficits are blemishing important sectors of U.S. industry.

In hearings in Congress, Mr Feldstein said that the U.S. trade deficit in 1983 is likely to be between \$60bn-\$70bn, double the 1982 level of \$35bn. For 1984 Mr Feldstein said the deficit could rise to over \$100bn, reflecting a drop in exports and a large increase in imports.

"Both of these trends are doing substantial damage to major segments of American industry," he added. The deterioration in the trade balance is primarily due to the rise in the real exchange rate of the dollar relative to the other major currencies of the world, he said.

Citing high real interest rates in the U.S. coupled with investment confidence that U.S. inflation will remain low, as the main factors behind the strong dollar, heavy trade deficit, Mr Feldstein said to increase in private savings or reduction in budget deficits is the main hope for shifting the dollar's value

• Increases in car and housing costs sparked a 0.5 per cent rise in U.S. consumer prices in September, the biggest rise in five months. The Labour Department reported yesterday. The increase is only slightly up on the 0.4 per cent rise in the previous two months.

In the first nine months of the year, the CPI rose at a seasonally-adjusted annual rate of 3.7 per cent, the Department said. In the third quarter, the increase was 5.3 per cent compared with 5.4 per cent in the second quarter.

### De Lorean trial 'prejudiced'

BY LOUISE KEHOE IN SAN FRANCISCO

THE TRIAL of Mr John De Lorean on charges of drug trafficking has been postponed while defence lawyers for the former automobile executive prepare motions for dismissal of all charges. The delay and possible dismissal plea came as a result of the weekend broadcast by CBS television news of video tapes showing De Lorean taking delivery of a suitcase of cocaine and his arrest by the FBI.

The De Lorean trial has been scheduled to begin in Los Angeles on November 1. No new trial date has been set. Gearing the trial delay, a Federal Judge in Los Angeles accused CBS News of interfering with the judicial process by airing the FBI surveillance tapes which were to have been used in evidence by the prosecuting U.S. Attorney.

"The CBS interference in that process may have devastating effects," said U.S. District Judge Robert Takasugi. "Justice and the judicial system may have been severely compromised." Lawyers on both sides

of the case have expressed concern that the showing of the tapes will prejudice De Lorean's trial.

The video tapes broadcast by CBS show Mr De Lorean meeting with undercover Federal Bureau of Investigation agents in a Los Angeles hotel room.

One of the agents presents De Lorean with a suitcase said to contain cocaine worth \$4.5m (£3m). Mr De Lorean is heard to say: "This is as good as gold." FBI agents then enter the room and arrest De Lorean.

### Mexico reschedules more debt

MEXICO has rapidly completed the rescheduling of its \$23bn (£15m) public sector debt with the signing in New York yesterday of eight separate restructuring agreements covering \$2.5bn, William Hall writes from New York.

Yesterday's signing was similar to earlier rescheduling agreements covering \$11.4bn in August and \$8.3bn last month and involves the refinancing of payments falling due between August 23, 1982, and December 31, 1984 into an eight-year loan with a four year grace period. The credit will carry a rate of 11 per cent over the London interbank offered rate of 11 per cent over U.S. prime rate at the lender's option.

### Jamaica in IMF row

JAMAICA and the International Monetary Fund are wrangling over whether the island has met economic performance criteria, and is thus eligible for continued drawdowns from a current three-year credit facility of US\$850m, Canarie James writes from Kingston.

## WORLD TRADE NEWS

## World airlines may impose ticket discounting sanctions

By MICHAEL DONNE IN NEW DELHI

THE WORLD'S airline industry, facing losses each year of up to \$1.5bn (£1bn) on "ticket discounting"—the sale of tickets at less than officially prevailing rates—yesterday decided to study the possibility of imposing sanctions on airlines which adopt this practice.

After a long debate at the annual meeting of the International Air Transport Association in Nairobi, at which it was clear that the airlines are far from united on this issue, it was decided to adopt a resolution that soothed all ruffled feelings but which may have doubtful long-term effectiveness.

The resolution, calling on the director-general of the association and its executive committee to "give high priority to the study and implementation of sanctions where this might be possible" against offending airlines, was passed without dissent.

But it was clear that many airline chief executives and chairmen remained either silent or did not dissent because they do not sincerely believe that any resolution in the Iata forum is likely to be effective.

The problem of ticket discounting is widespread—in the UK it is done through the so-called "bucket shops"—but in other parts of the world through many normal travel agency outlets or even directly by the airlines, with often tacit consent and protection of governments.

Ticket discounting represents the world airline industry's worst problem in terms of the annual drain on its revenues. The other major problem is "blocked earnings" where countries refuse to allow foreign airlines to send back home the money they earn from ticket sales in those countries.

## Pakistan gears up for automotive industry boom

By JOHN ELLIOTT IN KARACHI

PAKISTAN'S first large-scale foundry designed specifically to make castings for the country's rapidly growing automotive industry, is to be built soon near Karachi by the Government-owned Pakistan Automobile Corporation.

The castings will be used for Suzuki 800cc cars and vans and for Massey Ferguson and Fiat tractors produced by the corporation.

Assembly of Suzuki vehicles, which are also to be produced next month in India by an entirely separate operation, started a year ago. Some 800 vehicles are being assembled a month and the target is 1,800 a month by the middle of next year.

Locally, manufacturing is expected to start early next year after a joint company has been set up by Suzuki and the corporation. Royalties to be paid by the corporation to Suzuki are taking longer than expected to agree and this is delaying the start of the local manufacture.

The new foundry is expected to cost about \$16m (£10m) and was given approval by the executive committee of the Government's National Economic Council at the weekend.

The foundry is expected to be in production within two years. By that time the Government-owned steelworks now being built with Russian help at Pindi outside Karachi should be providing sufficient output to meet requirements for about

6,000 tonnes of castings a year.

This project follows another further development in the private sector by the Habib family group of Karachi. Called the Baluchistan Foundry, Habib's development is in trial production.

It is costing about \$3m and will produce malleable iron and other castings for the automotive, defence equipment and pipe-fitting industries.

Both projects are employing British consultants. Foundry Management Development is working for the automobile corporation which will soon be inviting world-wide tenders for equipment costing some \$6m covered by an Asian Development Bank loan. Kenneth Evans is working for Habib, which has mainly used European machinery.

The projects are significant because of the low level of Pakistan's industrialisation.

They will form part of a series of downstream developments from the Pipri steelworks which is also expected to feed a large-diameter pipe plant and a wire rod factory now being planned by two other Karachi companies, Crescent and Ashwani.

Along with a wheels factory about to go into production for the Automobile Corporation with technical assistance from GKN of the UK, they also form part of the first stages of the indigenisation of the country's expanding automotive industry.

# THIS YEAR, PLEASE GIVE A LITTLE MORE.



*Thank you*

## UK company wins order for Kalahari rail study

By J. D. F. Jones in Johannesburg

INTERNATIONAL airline representatives passed an air safety resolution in New Delhi yesterday after deleting mention of the shooting down of a Korean airliner last month, AP reports.

The resolution said the International Air Transport Association considers "the use of force against civil aircraft, recently and in the past, in the air and from the ground" as a matter of the gravest concern affecting air safety.

This latter practice costs the airlines at least \$500m annually and is getting worse.

But the problem of ticket discounting appears to be even more serious and is deteriorating by the year.

Even the airlines do not know the extent of the revenue losses they incur through the sale of tickets at below face-value prices. One senior airline chairman from the Middle East put the figure at \$1.5bn and declared that figure was conservative.

At yesterday's meeting, no clear solutions emerged. Some airlines were in favour of passing the whole problem to governments, others supported extension of current "monitoring" efforts by the airlines' own inspectors world-wide. Others thought the problem was almost insuperable and they should live with it.

In the ensuing debate, airlines could not even agree on what form of sanctions they should apply, and who was going to apply them. The resolution, proposed by Air France, was watered down so that, as finally approved, it merely suggested that the IATA secretariat should study "the implementation of a sanctions programme where this might be possible."

Officials and advisers here agreed that the first stage in the exploitation of Botswana's coal must be to export it via the eastern route, through the South African Railways system which terminates at Ellers, 100 miles across the border from the coalfields. Studies of the eastern route have been completed.

Both the climate now is different. It pirates have not yet learned that counterfeiting is morally wrong, they have at least discovered that it can be downright risky. And if the tone of official pronouncements indicates anything it is that the

UNTIL just a few months ago,

a dozen small watch and clock shops along Taipei's Linshen North Road had the hottest commodities in town: expertly-crafted copies of high-value watches by companies such as Rolex, Cartier, and Piaget. Foreign visitors were their biggest clients, snapping up \$25 to \$50 copies by the handful from display cases set literally on the sidewalk.

Nowadays, though, Linshen North Road's watchmakers are running scared. They do business from small back-rooms whose doors are cleverly disguised as wall-panels or from nondescript houses around the corner. Display cases, once crammed with hundreds of watches, now contain only a few, packaged in small lots in boxes the shopkeeper has to bolt through a back door. Some stores, the shopkeepers shuttered for days on end, a sign that a police raid has taken place somewhere close by.

"I hate these shops—they're giving my country a bad name," remarks an investigator for Taiwan's Ministry of Justice on a stroll through the neighbourhood.

Before Taiwan's authorities decided that counterfeiting was bad for the national image and sought legislation, about a year ago, to discourage it, the authorities' reaction would likely have been amanned indifference.

Pirates would have continued with their lucrative trades, and the only probable penalty would have been a slightly thicker "red envelope" or pay-off, to the local constabulary during sporadic law-and-order campaigns.

But the climate now is different. If pirates have not yet learned that counterfeiting is morally wrong, they have at least discovered that it can be downright risky. And if the tone of official pronouncements indicates anything it is that the

Taiwan has assured the U.S. of its determination to stamp out commercial counterfeiting which has brought complaints from U.S. companies.

Mr Pan Chia-sheng, Deputy Director-General of the Board of Foreign Trade said yesterday.

Reuter reports from Taipei.

The assurance came during talks between Taiwan's trade officials and a visiting sub-committee of the U.S. House of Representatives, headed by the sub-committee arrived in Taiwan last week to investigate counterfeiting and will report to congress.

Mr Pan said commercial counterfeiting was an international problem and called on all governments to crack down on it.

He stressed that buyers of fake products should also be held responsible for counterfeiting.

diplomatic isolation, plus resentment at the trade surpluses it continually runs with much of the developed world, have made it a convenient whipping-boy.

None of these factors excuses the violation of commercial property rights here, of course. But Taiwan's reputation and the tendency of some to automatically think of this country whenever counterfeiting is mentioned, make it that much harder for the legitimate businessman to promote his products abroad.

For instance, the head of a young electronics company, which recently developed an innovative microprocessor-based toy for pre-school children, found the going rough when he demonstrated the product to potential buyers. The comment, it seemed, was that the product was good—but too good to have been designed in Taiwan. Checks eventually confirmed that the toy was not a counterfeit but, by then, it was too late to meet marketing schedules for Christmas.

Some Taiwanese also suffer from a pirate-or-pursuer syndrome. "They copied the Apple II (the popular American home computer) down to the last detail because they figured nobody would buy something that looked like it was made in Taiwan," comments Mr Len Morgan, an independent computer consultant.

It is Government's task to put into action the new anti-counterfeiting consensus. But the Taiwanese business community also faces a task that will require a radical re-ordering of thought. Before they can convince others that Taiwan produces more than cheap, roughed-off merchandise, they must first convince themselves of the worth of their own creative efforts.

That latter task may prove to be the most difficult part of all.

The following are included in the prior-certification requirement:

radio-broadcast receivers, designed or adopted for fitting to motor vehicles (including receivers incorporating sound recorders or reproducers); radio-broadcast receivers, portable (including receivers incorporating sound recorders or reproducers), assembled or completely knocked-down, without cabinets.

## Philippines imposes electronics controls

By Our Manila Correspondent

The Philippines Central Bank yesterday imposed indirect controls on importation of 11 categories of electronic products in order, it said, to help conserve foreign exchange and protect companies taking part in Government-sponsored progressive electronics manufacturing programmes.

Under Enabling Circular 816, importation of such products must have prior certification of the Ministry of Trade and Industry, the programme's regulatory body.

The International Monetary Fund and the World Bank, which have extended balance of payments deficit-financing assistance to the Philippines, are known to exert free flow of trade. This is presumably why the Philippines Central Bank has opted for a non-monetary control device.

The following are included in the prior-certification requirement:

radio-broadcast receivers, designed or adopted for fitting to motor vehicles (including receivers incorporating sound recorders or reproducers); radio-broadcast receivers, portable (including receivers incorporating sound recorders or reproducers), assembled or completely knocked-down, without cabinets.

China-Hungary talks

CHINA AND Hungary have begun negotiations on expanding their trade, technological transfers and economic co-operation, Mark Baker reports from Peking.

It is not clear in what specific areas the co-operation would take place. But China has shown interest in gaining Hungarian equipment and expertise.

Counterfeitors are finding the climate has changed, Bob King writes

## Why Taipei's fakers are running scared



Mr Yao-tung Chao

Government plans to keep the heat on this time.

Take editorials in the local English-language Press—which generally reflect prevailing Government policy—for example. A couple of years ago, the papers were hedging their bets, saying yes, counterfeiting was wrong, but moral issues ought to be weighed against the amount of foreign exchange exports of fakes earned for the country. One editorial even went so far as to say that stopping counterfeiting could have a serious effect on Taiwan's export trade.

Nowadays, though, no one invokes the flag in defense of fakery. Quite the opposite: the editorial pages now brand counterfeiting "a national disgrace." Mr Y. T. Chao, Taiwan's Economics Minister, recently told the legislature that counterfeiting is one of the most serious problems facing Taiwan's industry. Despite the flood of fakes from other parts of the Orient and even from within developed countries themselves, they must first convince themselves of the worth of their own creative efforts.

But there is also strong resentment here over Taiwan's being singled out as the "counterfeiting capital of the world." Indeed, one could get the impression from the media and various parliamentary bodies in the developed world that Taiwan has somehow cornered the market on piracy, despite the flood of fakes from other parts of the Orient and even from within developed countries themselves. It is valid to suggest that Taiwan's

# Whose finger will be on our button?



## Mid-East power stations order for Belfast

By Brenda Keenan in Dublin

A BELFAST engineering company, which has carved a niche for itself in the Middle East, has won a \$10m order to supply small power stations in the region.

F. G. Wilson has grown in 10 years to one of Europe's leading manufacturers of power generating equipment. The present order will supply nine stations to various German, French and U.S. main contractors to provide power for facilities in remote areas.

The stations, of 7.5 MW and 4.5 MW, must all be commissioned and running by next March, and F. G. Wilson has taken on around 100 extra workers at its Belfast plant.

Two other Wilson companies are supplying the electrical switchgear and controls and the cooling and silencing systems for the stations, which are being installed on site by the company's engineers.

F. G. Wilson now employs around 500 people with more than 80 per cent of its output being sold outside the EEC.

## UK NEWS

# Telecom terms set out consumer safeguards

BY JASON CRISP

**BRITISH TELECOM** (BT), which runs the state-owned telecommunications industry, will be obliged to provide a full service to rural areas, give a free emergency telephone service and continue to provide public telephone boxes after it is privatised.

The conditions are contained in the long-delayed draft licence for BT, published by the Government yesterday as the Telecommunications Bill began to go through the committee stage.

A draft licence sets out BT's obligations to provide a universal telephone service and the restrictions on it to prevent it abusing its monopoly position when it is sold. The Telecommunications Bill will enable the Government to sell 51 per cent of shares in BT in what is expected to be the largest transfer of public assets to the private sector.

The licence, which will be one of the key elements in valuing BT, was broadly welcomed by BT itself.

Strongest objections came yesterday from the main British Telecom unions, which accused the government of trying to bulldoze the Bill and the licence through all-night committee sessions in the House of Commons.

Mercury, the private-sector telecommunications company which is

British Telecom has sharply accelerated its timetable for installing System X, Britain's digital electronic telephone exchange. Guy de Jonquieres writes.

MERRILL LYNCH, the Wall Street investment banking group, has ordered \$14m (£9.34m) of advanced computerised dealer boards developed by British Telecom (BT).

BT, however, strongly criticised the licence for requiring it to connect with the systems of other operators. BT objects because the licence will allow the terms and conditions of interconnection to be dictated by the Office of Telecommunications (OfTEL), the new regulatory body to be established by the Bill.

Sir George Jefferson, chairman of BT, warned yesterday that if such interconnection was not agreed on mutually agreeable technical and commercial terms, it could be damaging to BT's finances and its ability to sustain and modernise the telephone network.

The licence also lays down a number of conditions and obligations on BT to prevent it abusing its dominant position in the supply of equipment. BT cannot cross-subsidise equipment supply with profits from the network services, and will have to keep connection and local charges below the rate of inflation. The Government has not yet decided by how much.

BT will be able to continue to cross-subsidise these loss-making services after it is privatised. It will also be able to levy other networks - such as Mercury, the independent Hull telephone service and the new cellular radio networks - an access charge to share the cost of those loss-making services.

The system, developed by British Telecom's City of London area, was first installed in Williams and Glyn's international dealing room in June last year.

Merrill Lynch will use the boards to replace all its trading equipment in the U.S. Merrill said yesterday it chose BT's system over a wide range of other manufacturers' equipment "because it seemed to us it is a little more than a generation ahead of its competitors".

BT has also begun a joint venture with Centel Corporation to sell the boards - known as the City Business System - throughout the U.S.

Centel, an independent telephone system and cable television operator, expects to gain a significant share of the U.S. market of 10,000 to 12,000 of these systems.

The system replaces a mass of wires, switches and lamps with a visual display unit like a television and two telephone handsets. It can hold 10,000 pages of information.

## BT wins £9.3m Merrill order

By Jason Crisp in London

and Paul Taylor in New York

MERRILL LYNCH, the Wall Street investment banking group, has ordered \$14m (£9.34m) of advanced computerised dealer boards developed by British Telecom (BT).

BT, however, strongly criticised the licence for requiring it to connect with the systems of other operators. BT objects because the licence will allow the terms and conditions of interconnection to be dictated by the Office of Telecommunications (OfTEL), the new regulatory body to be established by the Bill.

Sir George Jefferson, chairman of BT, warned yesterday that if such interconnection was not agreed on mutually agreeable technical and commercial terms, it could be damaging to BT's finances and its ability to sustain and modernise the telephone network.

The licence also lays down a number of conditions and obligations on BT to prevent it abusing its dominant position in the supply of equipment. BT cannot cross-subsidise equipment supply with profits from the network services, and will have to keep connection and local charges below the rate of inflation. The Government has not yet decided by how much.

# Ray Dafter reports on privatisation of further North Sea assets Enterprise Oil packaged for sale

ENTERPRISE OIL is in a peculiar state for a sizeable independent North Sea company.

It has a rate of production which would turn a Texas wildcatter green with envy, and is shortly to be given a bundle of exploration licences which should keep teams of geophysicists happy for years.

And yet it has no shareholder (other than Mr Peter Walker, Energy Secretary, hardly any staff and no headquarters, apart from temporary accommodation with bankers Kleinwort, Benson in the City of London).

Enterprise is, in essence, an oil company in waiting. Formed from the oil-producing interests of British Gas Corporation, the company is about to be prepared for flotation on the Stock Exchange as part of the Government's programme for privatising state-owned assets. The process was being set in train late last night. Mr Walker was telling the House of Commons about his plans for the company and, especially important, his choice of chairman.

Enterprise has a stake in five commercial oilfields - Beryl, Fulmar, Hutton, North West Shetland and Montrouz - from which it is extracting some 29,000 barrels a day (b/d) of crude oil.

Output will be restricted to some extent when a new field - Arbroath - is commercially exploited. But reserves here will be insufficient to arrest totally the looming production decline.

The Government has instructed British Gas to give up eight exploration licences, containing 20 blocks or part blocks, in oil-producing areas of the Continental Shelf. It seems certain that these interests will be transferred to Enterprise in

ENTERPRISE OIL'S PRODUCTION INTERESTS ('000 barrels/d)

Field	1983	1984	1985	1986	1987	1988	1989	1990
Polar	1.7	2.1	2.6	2.6	2.1	1.7	1.1	1.1
Beryl	7.5	7.5	12.5	12.5	12.5	12.5	12.5	12.5
H. W. Nathan	14.2	20.5	22.5	22.5	22.5	22.5	22.5	22.5
Montrouz	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Hutton	-	-	4.8	4.8	4.8	4.8	4.8	4.8
Total	27.7	36.4	48.2	48.5	48.5	58.1	54.4	54.4

Note: Excluding production from the Arbroath Field, which might begin producing in 1988 providing Enterprise wins an additional 3,000 b/d in that year, according to Wood Mackenzie.

Source: de Zoete & Bevan

order to provide a more focused portfolio of interests.

But, with one or two exceptions these interests do not provide Enterprise with any great expectation of making a bumper discovery.

The company will either have to wait for the next round of licences in the hope of being granted more promising exploration acreage, or it must find its strong oil position to acquire promising interests from less fortunate companies.

Enterprise is ideally placed to do this, given that its heavily taxed production will enable the company to use tax credits in the exploitation of new interests.

Mr Ian Watt, oil analyst with de Zoete and Bevan, maintains that Enterprise is financially one of the best-placed independent producers on the basis of its rising production. But the company would need to acquire substantial additional exploration and development projects.

In this respect, a strong and experienced management will be a crucial ingredient in achieving success," he said.

Mr Peter Walker and Enterprise Oil are about to tackle this evident shortcoming. After last night's announcement of the new chairman, the company is expected to name its top management team within the next few days.

# Hewlett-Packard may expand in UK

BY CHRISTIAN TYLER, WORLD TRADE EDITOR

**HEWLETT-PACKARD**, the U.S. high technology electronics group, is considering further investment in Britain.

Plans appear to be well advanced and only the timing of the announcement remains to be decided. A company spokesman at the company's headquarters in California yesterday confirmed an interest in expanding to the UK, but would not disclose any details.

The venture was to have been discussed with Mr Cecil Parkinson, former Trade and Industry Secretary. Until his resignation, Mr Parkinson was to have visited the firm's Silicon Valley head office last week on a tour of the U.S. and Japan. It is not clear whether Mr Parkinson's resignation has caused a delay in the announcement.

Hewlett-Packard already has two plants in the UK, a factory making

computer memory devices which was opened in Bristol in January and a plant called Telecommunications Test Equipment at South Queensferry in Scotland. Other European factories are at Stuttgart, West Germany, and Grenoble in France.

The company claims to be the world leader in electronic testing instruments and the seventh largest computer manufacturer. About half its total sales are abroad, with 31 per cent going to Europe. Its biggest single overseas markets are in the UK and West Germany. Net sales were \$3.6bn in the first nine months of this year.

Further investment in the UK would be seen as a political coup by the British Government. Ministers believe they have succeeded in creating an unusually favourable climate for inward investment.

# Management contest won by accountants

BY MICHAEL DIXON

THREE ACCOUNTANTS yesterday won the UK national management championship by one of the smallest margins since the computer-based contest was started 13 years ago. This year's event began in February with an entry of 890 teams.

The winners, who received their trophy from Sir Michael Edwards, chairman of ICI, were Mr John Chappell and Mr Paul Webb, who work for Rank Xerox, and Mr Geoff Brown, who is head of finance at Shell UK in Manchester.

They managed their "paper" company in the London final to a profit of £1.22m. Second, only £0.009 behind, came a team of four from Rediffusion Radio Systems.

The three winners took home a prize of £2,000 and the Rediffusion team £1,000. M & G Investment trust was third with a "paper" profit of £0.80m and a prize of £150. Wayney Combe Reid, placed fourth with £0.65m, collected £500.

The contest - sponsored annually by the Financial Times, ICI and the Institute of Chartered Accountants in England and Wales with the Confederation of British Industry and the Institute of Directors as associate sponsors - also includes a "Plate" competition for teams knocked out of the final championship in the first round.

A £750 first prize in the Plate was won by a privately entered team led by Mr George Higgins, a Midlands engineer.

Sir Michael said the competition tested the two resources which were probably most needed by UK industry - management skills and teamwork.

"That is what the National Management Game is all about: People who have probably never worked together before overcome their individualities and together pit their wits to overcome a tough challenge," he said.

## BASE LENDING RATES

A.B.N. Bank	9 %	Hambros Bank	9 %
Allied Irish Bank	9 %	Mitroffel & Co. Trust	9 %
Anstoze Bank	9 %	Hull Samuels	9 %
Henry Ansbacher	9 %	C. Hoare & Co.	9 %
Arbuthnot Latham	9 %	Hongkong & Shanghai	9 %
Armcroft Trust Ltd.	9 %	Kingsnorth Trust Ltd.	10 %
Associates Cap. Corp.	9 %	Knocksey & Co. Ltd.	9 %
Banco de Bilbao	9 %	Lloyds Bank	9 %
Bank Hapoalim BM	9 %	Midland Bank Limited	9 %
BOCI	9 %	Edmund Manley & Co.	10 %
Bank of America	9 %	Midland Bank	9 %
Bank Leumi (UK) plc	9 %	Morgan Grenfell	9 %
Bank of Cyprus	9 %	National Bk. of Kuwait	9 %
Bank of Scotland	9 %	National Westminster	9 %
Barclays Belize Ltd.	9 %	Norwich Gen. Trst.	9 %
Baronne du Rhone	9 %	R. Raphael & Sons	9 %
Barclays Bank	9 %	F. S. Ratton & Co.	9 %
Beneficial Trust Ltd.	9 %	Northburgh Guarantee	9 %
Bremen Holdings Ltd.	9 %	Royal Trust Co., Canada	9 %
Brit. Bank of Mid. East	9 %	Standard Chartered	9 %
Brown Shipley	9 %	TCB	9 %
CLB Bank Nederland	9 %	Trans. Savings Bank	9 %
Canada Perini's Trust	9 %	United Bank of Kuwait	9 %
Castle Court Trust Ltd.	9 %	United Mibrank Ltd.	9 %
Cayzer Ltd.	9 %	Vakilshah Int'l. Ltd.	9 %
Cedars Holdings	9 %	Westgate Banking Corp.	9 %
Charterhouse Jephcott	9 %	Williams & Glyn's	9 %
Chuburton	9 %	Williams & Sons Ltd.	9 %
Citibank Savings	9 %	Yorkshire Bank	9 %
Clydesdale Bank	9 %	Members of the Accounting Heads Committee	9 %
C. E. Coates	9 %	7-day deposits 8.5% - 1-month 8.75%, short-term 9.00%/12	9 %
Comm. Bk. of N. East	9 %	1-day deposits 8.1%, 1-month 8.5%	9 %
Consolidated Credits	9 %	£10,000-£15,000 up to £50,000 9.5%	9 %
Co-operative Bank	9 %	£50,000-£100,000 up to £200,000 9.75%	9 %
Dunbar & Co. Ltd.	9 %	£100,000 and over 9.75%	9 %
Duncan Lawrie	9 %	Caravans £1,000 and over 9.75%	9 %
E. T. Trust	9 %	Domestic deposits 9.5%	9 %
Exeter Trust Ltd.	9 %	Mortgage base rate 9.5%	9 %
First Nat. Fin. Corp.	9 %	Money Market Cheque Accounts 9.75%	9 %
First Nat. Secs.	9 %	Effective annual rate 9.75%	9 %
Robert Fraser	9 %		9 %
Grindlays Bank	9 %		9 %
Guinness Mahon	9 %		9 %

# The Tobacco Advisory Council.

Glen House, Stag Place, London SW1E 5AG

No. 6 in a series.

مكتبة ابن الأثمي

## UK NEWS

## Former Rumasa chief given guarantees

By Raymond Hughes,  
Law Courts Correspondent

BANK guarantees totalling £25m have finally been provided for the protection of Sr José María Ruiz-Mateos, former head of the expropriated Spanish conglomerate, Rumasa.

They will indemnify Sr Ruiz-Mateos against any financial loss he may be held to have suffered if the Spanish courts eventually rule that the expropriation last February was invalid.

Provision of the guarantees was part of an agreement reached in July to enable a dispute over the ownership of the trademarks in Dry Sack sherry - which are valued at £25m - to be adjourned until it is fully tried in the High Court.

The Rumasa English subsidiary, Williams and Humbert, has challenged the validity of a pre-expropriation arrangement by which the trademarks were transferred from it to W & H Trade Marks (Jersey), a Channel Islands company controlled by Sr Ruiz-Mateos and members of his family.

Problems arose over the provision of counter-indemnities for the banks that were being asked to provide the guarantees. Sr Ruiz-Mateos insisted that they should not be given by banks associated with Rumasa on the ground that, were he to succeed in the litigation and regain control of Rumasa, his compensation would ultimately be paid from within the group.

Banco Exterior, the external arm of the Bank of Spain, has now given a £24.3m guarantee and Barclays Bank a £700,000 guarantee backed by Banco Exterior. In each case, it has been accepted that Banco Exterior will not be able to look to any Rumasa bank for indemnity in the event of the expropriation being declared invalid.

The Spanish Constitutional Court is expected to rule next month on the validity of the expropriation.

## Hugin managers to pay £13m for their company

BY CHARLES BACHELOR IN EINDHOVEN

**ELECTROLUX**, the Swedish household appliance group, is to sell its Hugin cash register subsidiary to its management in a £13m deal which will be funded largely by a group of British institutional investors.

Hugin's management, led by its group chief executive, Mr David Pope, a 44-year-old Englishman, will take up about 14 per cent of the share placement. The company has already held talks with about 30 UK institutions with a view to each of them taking up a maximum of 7 per cent of the 500,000 shares to be issued at £29 each. Hugin plans to go for a listing on the London Stock Exchange next year.

Hugin's British-led management has a 1981 pre-tax loss of £1.42m, before exceptional items, into a £1.34m profit last year and is projecting profits of at least £2m this year and £2.5m next year.

Hugin makes electronic cash registers and point-of-sale systems -

designed for retail outlets with between three and 10 checkouts - and sees its main market as the larger food and general retail stores.

It expects to achieve sales of £28.2m this year with 25 per cent of turnover in the UK and 23 per cent in Sweden. It has marketing companies in 10 countries and distributors in more than 50 others. Turnover of £28.8m is forecast for next year.

Electrolux bought Hugin from the Swedish Co-operative Union and Wholesale Society in 1981 when the group was making large losses through an unsuccessful diversification programme.

Mr Pope said: "They agreed to allow the management to become involved in the company if it was successful and was sold off. We turned Hugin round by going only for major customers and by putting the right price on our products and then taking them to cost-effective manufacturers."

Hambros Bank is arranging the placing of the shares and £450,000 worth of loan stock through stockbrokers Laing and Crucksbank. The net proceeds will be £12.9m. Applications close on November 11.

### JAPANESE PHOTOCOPIER PLANT FOR BRITAIN

## Ricoh reverses a trend

BY JASON CRISP

**THE DECISION** of Ricoh, Japan's largest producer of photocopiers, to set up manufacturing operation in the UK, represents a small but significant change in a trend.

For powerful competition from Japanese companies has ended much of Europe's photocopier production. More and more copiers are made in Japan, although many of them still bear the label of European companies.

Ricoh's move to manufacture at Telford, in the West Midlands, is beginning modestly. Initially it is spending £5m to build a plant to make and recondition photocopier drums which will be replacement parts for its copiers in Europe. It will also make bottles of dry toner - the chemical which forms the image on the photocopy.

Investment is expected to rise over three years to about £15m, and the company will employ about 170 people producing 2m bottles of toner and 150,000 drums. Mr Hiroshi Hidaka, president, said Ricoh might eventually assemble plain

by the Japanese companies forced major changes in the Xerox companies.

Xerox has made major cuts in production costs to try to match the Japanese, including redundancies of more than 12,000 in its worldwide workforce of 120,000. Earlier this year it had its biggest new product launch with the Series 10, which replaced almost the entire range below the most expensive machines. The Series 10 has, for the time being, halted Xerox's decline in market share.

Ricoh is the largest manufacturer of photocopiers measured by the number of machines. Xerox's revenues are much greater because of its large installed base and its dominance at the expensive - and profitable - top end of the range where its only competitor are IBM and Kodak.

In the past two years Ricoh has been suffering from falling profits. In the financial year to March 1983 it had a net income of \$42m on sales of \$1.5bn.

Writing is in plain paper copiers for the past 10 years since the Japanese found a way round its patents. The Japanese attack began with high volumes of low priced copiers sold through dealerships. Xerox concentrated on the top of the range sold through its large (and expensive) direct sales force. The rapid fall in copier prices and a move up market

"Ah!", a Chinese connoisseur examining our Premier Laque Roller Ball might rapturously exclaim, "pure vegetable laque!"

An oddly prosaic response to such a beautiful finish. Unless you know your Chinese history.

The pure laque finish was first evolved by craftsmen of China's Han dynasty in the 2nd century BC.

Our method is descended directly from theirs. We use nothing but authentic Chinese laque, applying as many coats as they did.

Even the gold flecks in the depths of our laque finish are still carefully placed there by hand.

Indeed the pen has a brilliance that Han craftsmen considered the epitome of their art.

But if they admired its finish, they would have been astonished by the perfection of the Roller Ball's writing.



Writing inks have been made since 3,500 BC from all sorts of unlikely materials.

The Chinese and Egyptians had been experimenting with different writing inks since at least 3,500 BC.

They considered themselves experts.

One Chinese master insisted that only the lamp-black of peach kernels be used in ink-making.

However, writing with such inks was slow, laborious work.

The monks of the middle ages congratulated themselves on having learned to make liquid ink from the tannin in oak galls.

But their inks dried slowly and faded fast.

More recently, some believed perfection had at last been reached by our free-flowing fountain-pen Quink.

But the Laque Roller Ball uses ink many times finer than the finest fountain-pen ink.

We filter it molecule by molecule, until it contains no particle larger than one micron, or one millionth of a metre.

When we invented our Roller Ball, dyes fine enough to be used in its ink simply did not exist. So we invented those too.

Our black Roller Ball ink is blended from four separate dyes: blue, violet, yellow and orange.

While greenish-blue and violet dyes make our blue truly royal.

The Laque Roller Ball glides smoothly across paper, leaving wet, glowing words that quickly dry.

The last words, you might say, in the history of writing. From the last word in pen and ink:

PARKER

## ENERGY REVIEW

FINANCIAL TIMES  
FILM SERVICE

20 Supersize prints for £2.25

Now 30% Bigger Than Ordinary Enprints

## TOP QUALITY

All prints will be borderless, Supersize Superprints, round cornered and hi-definition sheet.

## FAST SERVICE

On receipt of the films at the laboratory, all Kodacolor II 110, 126 &amp; 35mm films will be processed in 48 hours. Other film makes and reprints can be processed but are not covered by the 48 hour guarantee and so take longer.

Please allow for variations in the postal service and the fact that there is no weekend working in the laboratory. Films should be returned in approximately 7-10 days.

Reprint prices are available on request. We do not accept C22, sub miniature, Minolta or black and white film.

## COMPETITIVE PRICE

Developing, postage and packing at 85p per film plus a printing charge of 7p per print.

Prints returned by first class post to your home, and full credit is given for negatives that are not technically printable.

NO. OF EXPOSURES	FTFS PRICE
12	£1.69
15	£1.80
20	£2.25
24	£2.53
36	£3.57

## COLOUR PRINT FILM

Top quality 24 exposure colour print film only £1.25 available in 110, 126 and 135 sizes.

Complete the coupon below and post to: Financial Times Film Service, PO Box 45, Taplow, Maidenhead, Berks SL6 0AQ, telephone: 0754 587955.

Note: While the utmost care is exercised to ensure the safety of films delivered, we regret that no liability can be accepted for any losses resulting from the loss or damage to any films.

Registered Office: 3 Ridgeway Park Drive, Maidenhead, Berks.

Please enclose cheque/PO, made payable to "Financial Times Film Service" and post with film and coupon in a strong envelope to:

Financial Times Film Service, P.O. Box 45, Taplow, Maidenhead, Berks SL6 0AQ.

Film Type	No. Req'd.
110/24	
126/24	
135/24	

 If Ordinary Enprints required please tick box

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

This offer is only applicable to readers of the Financial Times within the UK. We process on the basis that the film value does not exceed material cost and our liability is therefore limited to that amount. Offer valid to 31/12/83. Minimum charge £0.50. Registered in England No. 1007290.

## A London launch for crude oil futures

By John Edwards, Commodities Editor

THE LAUNCH of the London crude oil futures contract on November 21 could have a considerable impact on a vital aspect of the oil industry—pricing.

The prime function of a futures market is to provide protection against the losses incurred by unpredictable price fluctuations. Our experience with other commodities has shown that futures can, and do, play a large part in influencing price expectations.

Indeed, on many occasions futures set price trends by reflecting economic and political developments, as well as the fundamental supply situation that governs prices in physical trading.

The very existence of a central, identifiable place from which prices are issued in a constant stream to reflect day-by-day developments becomes a reference point for the outside world.

At present non-trading outsiders, including the press and politicians, have some difficulty in checking on the movements in crude oil prices, especially those in the independent "spot" market, if they do not subscribe to information services or know the relevant traders. From November 21 they will simply be able to refer to the futures market quotations which are arrived at in open-cry public trading for all to see.

Buyers and sellers of actual oil will also find that publicly quoted futures prices have a potent influence on their physical transactions. Buyers, possibly with little knowledge of the oil industry, tend to be guided by published prices.

Futures markets usually involve "paper" transactions, involving only a commitment to buy or sell a certain amount of a commodity at a future date. These commitments do not normally result in actual deliveries since they are cancelled before the delivery date due.

Nevertheless, any futures contract has to include the facility to make and take delivery of the physical product, thus keeping prices to realistic levels. As a result, physical and futures prices tend to become aligned.

In the case of the London crude oil futures contracts, the International Petroleum Exchange, which is sponsoring the market, is planning to become directly involved in

physical oil pricing. The contract is to have North Sea Brent Blend as a marker crude. However, several other comparable light, low-sulphur crudes from the North Sea, Nigeria, Algeria and Tunisia, will also be deliverable against the contract at premiums or discounts to be set by the International Petroleum Exchange a month before the delivery date becomes due.

The exchange says that these differentials will be assessed purely on transactions in the physical market. They will not, therefore, be distorted by the political considerations that influence other organisations, such as Opec, when fixing differentials. The IPE claims it will give an entirely independent judgment, free from the "cloak of politics." But inevitably the differentials set by the Exchange will influence the physical market.

An unusual feature of the new market is the so-called alternative delivery procedure.

The normal basis for delivery under the contract is into storage tanks, pipelines or ships at the ports of Rotterdam and Amsterdam. For less than 50 lots (of 1,000 barrels each) delivery must be made into tanks at Rotterdam or Amsterdam.

The alternative delivery system allows any crude, or port of delivery, to be used to settle an outstanding futures contract providing that the buyer and seller agree the terms a month prior to the Rotterdam/Amsterdam delivery becoming due. The premiums and discounts agreed in this manner may also set guidelines for transactions in the physical market, especially since the alternative delivery procedure is expected to appeal particularly to the big users.

Brent Blend has been chosen as the marker crude not only because it is the largest volume crude traded in Europe but also because of its similarities with West Texas Intermediate and Light Louisiana Sweet. It is hoped this will encourage arbitrage trading between the London market and the existing crude oil futures contracts in New York and Chicago.

The size of the London market's lots at 1,000 barrels, is equivalent to the New York Mercantile lots of 42,000 U.S. gallons. The crude oil contract on the New York Mercantile Exchange has been going great guns since it was launched in March. Daily



The gas oil trading "ring" at the International Petroleum Exchange's new London premises

turnover has grown strongly in use—as opposed to speculative deals—represents an abnormally high volume of business when compared to other U.S. commodity futures markets.

In contrast, the Chicago Board of Trade's contract, introduced at the same time, has fallen back after a bright start with turnover running at a low level and open interest at below 12,000 lots.

The Chicago Board of Trade is a far bigger exchange, with a great deal more resources than the New York Mercantile. But it appears to have misjudged badly. Initially turnover in Chicago was above that in New York, but the import was coming primarily from "local" professional speculators. Once the first delivery date fell due it became apparent that the contract terms did not suit the oil industry.

The New York Mercantile Exchange was able to draw on its experience in building up the heating oil and gasoline futures contracts. It has close connections with the oil industry and tried to ensure that the contracts suited the oil trade.

An unusual feature of energy

trading of the sort of contract could have a major influence in making it one of the most successful futures markets ever launched in London.

Perhaps the IPE feels that the oil industry has been sufficiently "educated" in the use of futures or that the crude oil contract does not require heavy selling.

Mr John Woodhead, chairman of the IPE, claimed last week that it would be satisfied if turnover reached 500 lots daily within the first six months of trading — a very modest target, bearing in mind that the gas oil contract now averages turnovers of between 2,000 to 3,000 lots a day.

Trading activity in gas oil futures has been somewhat disappointing recently, perhaps reflecting the uncertain state of the market. Since the launch of the futures market, gas oil has not enjoyed the kind of boom conditions that generate increased interest in futures trading, especially from speculators.

Although the IPE is adopting a low profile on the crude oil contract, there is considerable confidence that it will prove a winner. Even if it is not used by the majors, there are plenty of independent oil traders who will have an interest in futures. The exchange is confident that it will pick up a lot of the speculative "day-trading" trading in Brent oil, whereby single cargoes change hands many times before reaching the eventual consumer.

Futures markets are still a mystery to many oil companies, or merely viewed as an irritant adding confusion to the traditional marketing pattern. But they are likely to become an even more powerful influence if the present unstable conditions in the industry show there is a real need for the crude oil contract.

At its new premises in Dummer House, Mark Lane, in the City of London, the IPE already has facilities for simultaneous trading in three separate "rings". One ring is used for gas oil trading and one will be used for crude oil, the third could be used for gasoline (petrol), for which a contract is drawn up and waiting in the wings.

The longer term plan is to introduce contracts to cover all the products made from the oil barrel. But much will depend on the success or otherwise of the crude oil contract.

## FOLLOW THE LEADER

In 1977 Renault upset a lot of people by being the first to introduce turbocharging to Formula 1 racing.

All of a sudden, the name of the game changed to high performance—or high efficiency.

Following the timeless premise of "seeing is believing", no fewer than seven nobles turbocharged their racing today.

Including Britain's Lotus, who power their cars with the V6 Renault Gordini engine.

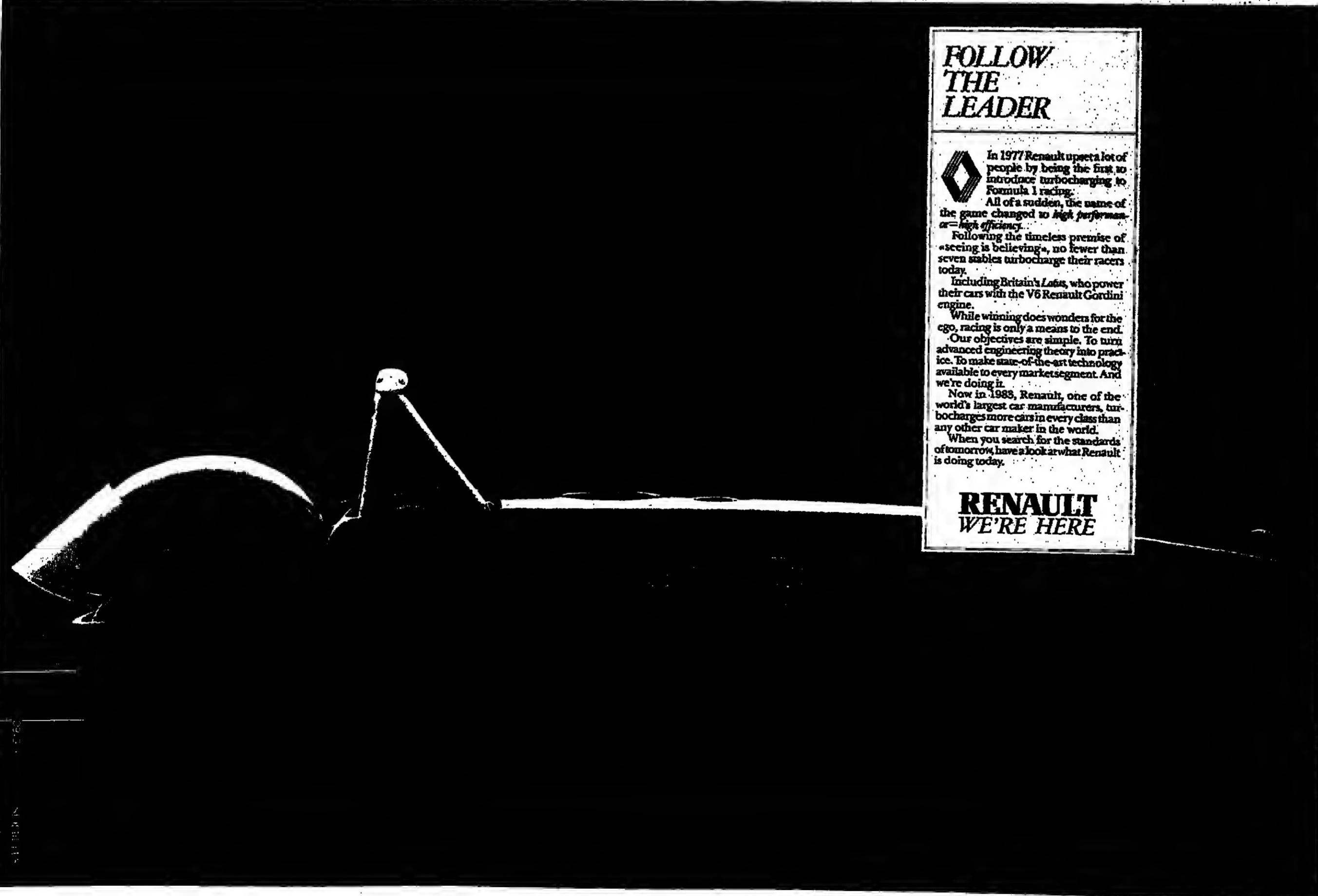
While winning does wonders for the ego, racing is only a means to the end.

Our objectives are simple. To turn advanced engineering theory into practice. To make state-of-the-art technology available to every market segment. And we're doing it.

Now in 1983, Renault, one of the world's largest car manufacturers, turbocharges more cars in every class than any other car maker in the world.

When you search for the standards of tomorrow, have a look at what Renault is doing today.

RENAULT  
WE'RE HERE



## APPOINTMENTS

### New chief executive for St. James's

Mr Simon Culkin has been appointed chief executive of ST JAMES'S CORPORATE COMMUNICATIONS from November 1. Mr Culkin is managing director of Response Advertising and prior to that was managing director of Charles Barker City. Mr Peter Frost, managing director, has been appointed executive deputy chairman. Mr Bill Colbert and Mr John Ellwood, associate directors, have been appointed directors and Mr Roy Bennett, Mr Alan Johnson and Mr Derek Proffitt have been appointed associate directors. Mr John Castle, chief executive of Lopex, has been appointed non-executive chairman of St James's following the retirement from full-time executive duties of Mr Harry Bengough. Mr Bengough will remain a consultant. Mr Michael Wyndham has chosen to be a director of St James's to concentrate on the overall development of the Lopex City Group which comprises St James's, Lopex Public Relations and Birn, Shaw.

The Earl of Limerick has joined the board of DE LA RUE CO. He is vice-chairman of Kleinwort Benson, and until earlier this year chairman of the British Overseas Trade Board.

Sir James Goold, chief executive of MacCaggart and Mickel, has been appointed a director of MORGAN GRENFELL (SCOT)

(LAND). Sir James has recently returned as chairman of the CBI in Scotland.

The VOLAC GROUP has appointed Mr Keith Harwood to the new post of group financial controller. He joins the company from Price Waterhouse.

Mr Peter Viney has resigned from EMESS LIGHTING to concentrate on his personal business interests. Mr Viney has been non-executive chairman of Emess for four years and he has been succeeded by Mr Michael Meyer, managing director, who will now combine this role with that of executive chairman.

Mr Jack Blanche, publisher for the past 17 years of Good Housekeeping, has been appointed to the newly formed post of corporate executive in charge of corporate management for THE LOPEX CITY GROUP which comprises St James's, Lopex

Public Relations and Birn, Shaw.

Mr Quentin MacDougall has been appointed managing director of JEAN SORELLE. He was managing director of Shulton (GB).

Mr Antonio Carlos da Silva Prado has been appointed representative of BANCO CREDITO NACIONAL SA (incorporated in Brazil) in London, with regional

responsibility for Europe, the Middle East and North Africa. He succeeds Mr Reinhard Marsman, who has completed his assignment with the bank.

UNIVERSAL-MATTHEY PRODUCTS has made two changes to its board of directors with the appointment of Dr J. E. Hughes and Mr V. Dean Freese.

Mr Hughes, who was recently appointed as managing director of Johnson Matthey, the company's British shareholder, also became chairman of UMP. Mr Freese was appointed by the American parent company, UOP Inc, where he has recently become president.

The two retiring directors, Mr J. Crawford (UOP), the former chairman, and Mr Ron Hewitt (UMP) have served on the UMP board since 1976. The same changes apply to the board of administration of Universal-Matthey Products (Deutschland), the German sister company, where Dr Hughes will again act as chairman.

Mr Donald du Preez Braham has joined the board of the LOCATION OF INDUSTRY BUREAU.

Mr Nicola M. J. Y. Plummer has been admitted to the partnership of MOSS MILLS AND PARTNERS, underwriting agents at Lloyd's.



Mr John Bailey, chief executive of Berger Industrial Coatings

### CONTRACTS

### Kent Process Control wins £0.95m work

KENT PROCESS CONTROL, a Brown Boveri Kent company, has won three contracts totalling £950,000 to supply process control systems for natural gas drilling and production platforms in the Morecambe Bay Gas Field. The first order is for fully instrumented control panels to monitor and control gas flow and utilisation on three unmanaged drilling platform. The second order covers the associated interface and barrier cubicles, whilst the third order is for instrumentation on the central production and accommodation platform. When the platforms enter service in 1984-85, the instrumentation will allow remote monitoring and control of production via a telemetry link to the central control room at the Barrow shore terminal. All the orders were placed with Kent Process Control by Brown and Root (UK) on behalf of Hydrocarbons (Great Britain).

Water flow through the southern

tunnel main under the River Thames is to be monitored by equipment supplied by ATS (TELEMETRY) in a £120,000 contract with the Thames Water Authority's North London division. Equipment supplied will also allow control and monitoring of various pumping locations at Hampton now being modernised.

DEWPLAN (ET) has won orders worth over £200,000 for the supply of effluent plant. For Ross Foods Hull factory, Dewplan is supplying a screen and rotation system for the treatment of waste from meat-based convenience foods. In Dagenham, at Ford Motor Company's plant, existing sand filters are being refurbished for treating river water for process use.

At Loog John International's Ben Nevis malt whisky distillery, a two stage high-rate biodrier is being installed. Other contracts include a lime dosing plant for

the Central Electricity Generating Board's Fiddlers Ferry power station, and a fat separation plant at Milk Marketing Board dairy at Severside.

British Gas Corp has awarded a £5m contract to PA for the development and implementation of computer-based systems for the Morecombe and Rough offshore gas fields. The award also covers the provision of professional advice on maintenance, materials control and logistics. The systems, to be known as LOGS (location and logistics management systems) will be developed by PA's oil and gas division and computer and telecommunications division.

CONTINENTAL MICROWAVE HOLDINGS has been awarded a contract by British Telecom to supply new generation portable microwave link equipment for the transmission of high quality colour television signals. The contract is worth around £900,000 with early options of £1.4m.

The Ministry of Defence has signed a contract worth in excess of £1m with IAI to supply voice communications control systems for the re-equipping of air traffic control centres at many of the UK's Royal Naval air stations. IAI Stratus systems will provide bi-directional communications for operational staff using radio and telephone networks to handle aircraft movements both in the air and on the ground. The contract calls for systems to be installed at 17 UK RNAs locations including the principal sites at Yeovilton, Portland, Culdrose and Lee-on-Solent.

CARSON OFFICE FURNITURE has been awarded a further contract worth £200,000 from Trafford Metropolitan Borough Council. The contract is to supply screens and desking from Carson's range of Link 900 systems furniture for the Town Hall at Stretford, which is being extended to accommodate 300 additional employees presently occupying leased accommodation.

Orders worth £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES (STC). The equipment, to be supplied next month by STC Telecommunications' Basildon-based transmission products division, includes 8 Mbit/s and 140 Mbit/s optical fibre units and 34/40 Mbit/s multiplexers.

orders worth over £200,000 for optical communications equipment have been awarded by British Telecom to STANDARD TELEPHONES AND CABLES

# FINANCIAL TIMES

BRACKEN HOUSE, CANNON STREET, LONDON EC4P 4BY  
Telegrams: Finantimo, London PS4. Telex: 8954871  
Telephone: 01-248 8000

Wednesday October 26 1983

## An ill-judged adventure

**THE INVASION** of Grenada by U.S. troops, supported by six of the small east Caribbean states, is an action which will require a great deal more explaining than has so far been forthcoming from President Reagan. The U.S. action, against the advice of Britain and against a sovereign Commonwealth state, has created an understandable furor in the House of Commons. Force has been employed, with little apparent effort to use other means to resolve the situation created by the bloody overthrow last week of Mr Maurice Bishop, the Grenadan Prime Minister.

Until Mr Bishop was killed, the Grenadan Government with its home-made brand of Marxism was an uncomfortable neighbour for the Caribbean states. The new regime headed by General Hudson Austin, the army commander, having eliminated Mr Bishop and some of his colleagues, seemed to be moving Grenada towards a more militant form of Marxism, seeking closer ties with Cuba and the Soviet Union. The regime looked ugly.

### U.S. hegemony

Caribbean leaders were understandably alarmed by what was happening; for it is comparatively easy in such small communities for a group of armed men to take control. In particular, the smaller Caribbean members such as Antigua, Barbados and St Lucia felt threatened. What happened in Grenada could happen to them. From the start, they have been the ones pressing for military solution.

While their fears are understandable and they were entitled to turn to the U.S. for support, it is highly questionable whether the U.S. should have listened to them so promptly and gone along with what they wanted. The temptation to exert American hegemony in its own backyard, so soon after the tragedy of Lebanon and at a time when the Administration feels Cuba and Nicaragua need to be taught a lesson, seems to have been irresistible.

America has been careful to ensure that it has acted with the backing of those of Grenada's neighbours affected most directly by the anti-Bishop coup. However, the invasion—no matter how successful— involves serious risks.

In the first place, America's international image is liable to be tarnished. The use of force to control the Caribbean has

been sanctioned, reviving memories of the American intervention in the Dominican Republic in 1965. It is doubtful whether the overthrow of Mr Bishop seriously jeopardised American strategic interests in the area. As for Cuba, the authorities there seem genuinely embarrassed by Mr Bishop's execution. Even if General Austin wanted to push Grenada more towards Cuba there is no evidence yet that Cuba would have accepted such an overture.

### Serious split

The U.S. case for military intervention is weakened by two other factors. Britain disapproves of the use of force. Britain is after all a head of the Commonwealth of which Grenada is a member. The intervention has also produced a serious split within the Caribbean, with larger states such as Jamaica firmly against such action, arguing instead for a mix of economic sanctions and diplomatic ostracism. This approach was never even tried. Indeed, the smaller east Caribbean states, aware of Britain's attitude, in effect went behind the UK's back.

As a result, the U.S. has seriously embarrassed its staunchest European ally and created a rift within the Caribbean. On the ground, it has to give credibility to its invasion by quickly gaining control and restoring the democracy it went in to defend. This may not be as easy as it seems.

### Different standards

Mr Bishop's enemies made sure that the principal figures in his government were eliminated. New leaders have to be found. The co-operation of the population with the invaders' plans cannot be taken for granted. The U.S. and its Caribbean allies were not invited in by any group on the island. Beyond all this, the U.S. appears to be exercising the doubtful principle that different standards apply to intervening in small islands or countries and intervening in larger ones.

This new American adventure, undertaken against the advice of the British Government, is bound to strain Anglo-American relations. It comes at the worst possible time, when Mr George Shultz, the U.S. Secretary of State, will shortly be attempting to persuade the country's plenipotentiary Minister of Planning.

For although, after a year of broken promises and unrealistic forecasts from Brazil, the IMF managing director is said to have developed some animosity to the country's economic team—as have many of the world's

bankers and most of Brazil's own business community—the reason for fearing a genuine impasse go well beyond the trial of strength between two "authoritarian figures" as one to political who has worked with both M de Larosiere and Sr Delfim describes them.

If M de Larosiere has indeed now decided to dig his heels in and insist on Congressional passage of the wage law before any IMF money is released, it is primarily because he wants to maintain the IMF's credibility as the final arbiter of international financial responsibility. Without that standing, the IMF believes that it would no longer have the ability to marshal substantial private banking funds for countries which earn its "seal of approval" by implementing IMF-sponsored adjustment programmes.

Thus the wage law, which few observers of Brazil's fledgling experiments in democracy ever expected to be passed by Congress, but which still continues to be effective in modified form, is as important to the IMF for its symbolism as for its economic effect.

At the political level, passage of the wage law by Congress would indicate, as one top Brazilian banker puts it, "the long-term support of the Brazilian people for the IMF agreement". On the other hand, he argues, that if the IMF package is pushed through only by the Government, it might not survive next year's presidential election.

However, if M de Larosiere



Mr Antonio Delfim Netto (left), Brazil's plenipotentiary Minister of Planning: his battle of wills with the IMF is now more than just "theatre"

### M de Larosiere concerned about the credibility of the IMF

ranks in their negotiations with heavily indebted nations.

Yet, despite the potentially calamitous consequences of a decision, there is a curiously widespread belief in Brazil that the IMF loan will not in fact be approved. And this not just explained by the Brazilian's natural sense of theatre, which leaves even the staidest of businessmen and government technocrats to characterise the current crisis as a personal battle of wills and wits between M de Larosiere and Sr Antonio Delfim Netto, the country's plenipotentiary Minister of Planning.

For although, after a year of

broken promises and unrealistic

forecasts from Brazil, the IMF

managing director is said to

have developed some animosity

to the country's economic

team—as have many of the world's

bankers and most of Brazil's own business community—the reason for fearing a genuine impasse go well beyond the trial of strength between two "authoritarian figures" as one to political who has worked with both M de Larosiere and Sr Delfim describes them.

If M de Larosiere has indeed now decided to dig his heels in and insist on Congressional passage of the wage law before any IMF money is released, it is primarily because he wants to maintain the IMF's credibility as the final arbiter of international financial responsibility. Without that standing, the IMF believes that it would no longer have the ability to marshal substantial private banking funds for countries which earn its "seal of approval" by implementing IMF-sponsored adjustment programmes.

Thus the wage law, which few observers of Brazil's fledgling experiments in democracy ever expected to be passed by Congress, but which still continues to be effective in modified form, is as important to the IMF for its symbolism as for its economic effect.

At the political level, passage of the wage law by Congress would indicate, as one top Brazilian banker puts it, "the long-term support of the Brazilian people for the IMF agreement". On the other hand, he argues, that if the IMF package is pushed through only by the Government, it might not survive next year's presidential election.

However, if M de Larosiere

thinks that Congressional support is indispensable to sustain the confidence of international bankers, he is probably wrong. Most bankers, by their own admission, are looking at only this year's and next year's prospects and are concerned almost exclusively about Brazil's ability to improve its trade performance. The lead-

ing banks are convinced that they can arrange the required \$6.5bn syndication by the end of the year, taking Brazil's long-term future on trust, provided only that the IMF gives its go-ahead.

But the stalemate over the wage law has a more serious economic dimension both for Brazil and for the IMF. For it is a symptom, rather than a cause of fundamental economic flaws which will almost certainly bring the whole adjustment programme to the verge of collapse yet again in the next six to nine months.

Practically every economist in the Brazilian Government in the private sector, and for that matter in the international banks, seem to agree that some at least of the financial targets

in Brazil's letter of intent to the IMF have no chance of being achieved. It is not just that inflation this year is likely to exceed 180 per cent, rather than the 152 per cent agreed with the fund. What is worse is that price increases are still accelerating ever more rapidly to levels which are described as "hyper-inflation" even in

now making these targets unattainable because of the over-run of inflation.

Indeed, according to one highly speculative line of argument among Brazilian economists, it is the knowledge that the economic package will lead inevitably to another embarrassing re-negotiation between Brazil and the IMF next spring, which is now making M de Larosiere seek a reason for delaying the whole adjustment programme.

The one man in Brazil who still claims to believe in the IMF target, Sr Ernesto Galveas, the Finance Minister, tacitly underlines the reasons for the IMF's concern about its own reputation in reply to a question about the unreality of his Government's latest official projection: "These are not only our forecasts, all these numbers and projections have been checked and agreed by the top economists in the IMF and in the international banks."

Thus, if the IMF board approves the loan to Brazil next month it will probably not only be taking the Government's wage policies on trust, but also, in effect, admitting that the IMF's targets for credit creation and public sector borrowing, which are the basic touchstones of all IMF programmes, will almost certainly be breached by the end of this year.

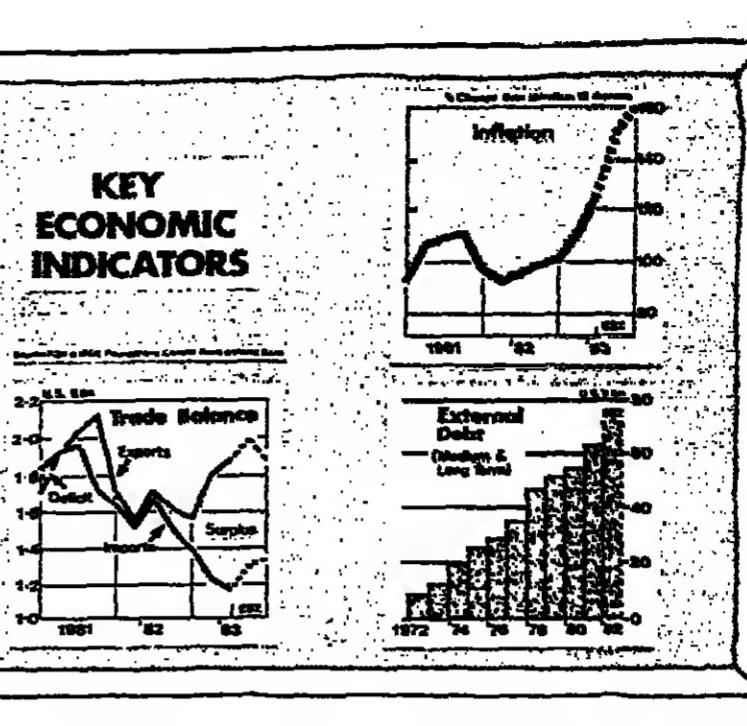
The public borrowing targets, in particular, will certainly force Brazil to seek a waiver from the IMF once the figures for December become available next year, according to senior officials. They note with some chagrin that the IMF insisted against the Government's persistent pleas that the inflation adjustment of Brazil's indexed debt had to be included in the definition of public borrowing.

At present international bankers do not seem unduly perturbed by this prospect for one

## BRAZIL AND THE IMF

# A battle of wills and wits

By Anatole Kaletsky in Rio de Janeiro



simple reason. Brazil may be fondering in its internal financial management but it is performing exactly as target in its external trade — notching up a trade surplus of over \$800m this year, with a good prospect of delivering the \$800m agreed with the IMF for 1984.

Since the trade balance is ultimately what matters in determining a country's ability to service its debts, there is a view among some bankers that one can separate Brazil's external and its internal economic crisis.

Indeed it is arguable that the IMF should have concentrated on the external adjustment, which is if anything better than planned, leaving the question of inflation out of its target altogether. Clearly events are not bearing out the IMF's traditional counter-argument to this view, which states that internal adjustment is a pre-condition for satisfactory external performance.

The trouble, however, is that this standard IMF doctrine is actually being stood on its head in Brazil — the extremely rapid external adjustment is making internal adjustment impossible.

This, according to Brazilian economists ranging from monetarists to liberal Keynesians, is the fundamental flaw in the IMF prescription for their country. Most of the acceleration of inflation this year has been directly attributable to the measures taken in support of the external adjustment — above all, the 30 per cent devaluation of the cruzeiro in February, which Sr Galveas admits was "clearly inflationary, but bad to take priority in order to stimulate exports."

The abolition of subsidies for oil and wheat sales that summer

### Economists see a fundamental flaw in the IMF prescription

and the loss of competition from imports in domestic markets resulting from the Government's strict import controls, can also be put down to the need to produce an unpredictable turnaround in the balance of payments. While the abolition of subsidies may reduce Government deficits and inflation in the long run, the IMF's programme seems to ignore their immediate inflationary effect.

Even the feverish expectations of further price increases and devaluation, which are now perhaps the biggest factor fueling the spiral towards hyper-inflation in Brazil, stem partly from the universal conviction in Brazil that the IMF-inspired adjustment is simply impossible.

An article on the long-term prospects for the Brazilian economy will be published early next month.

## Health Service efficiency

**THE GRIFFITHS** report on management in the National Health Service, published yesterday, offers an exact diagnosis but a debatable course of treatment for Britain's health system.

In pointing to the lack of accountable and identifiable management at both the national and local level, Mr Griffiths has identified a crucial weakness which has bedevilled the NHS since its formation and which has left untouched in two major reorganisations in the last decade.

If that happens, and if the Government can avoid pointless confrontation over its strategy on privatisation and pay, the Griffiths report offers the best chance for a long time to make real progress in improving the Health Service. Doctors, although they have reason to doubt the NHS will have plenty of chance to influence the detailed implementation of the plan without needing to insist upon the tactics of crude across-the-board cuts and "efficiency savings" which have been cut by another name.

If that happens, and if the Government can avoid pointless confrontation over its strategy on privatisation and pay, the Griffiths report offers the best chance for a long time to make real progress in improving the Health Service. Doctors,

### Men & Matters

Roy Griffiths. thing is certain. It will not be

### Clarke's dollar

A well-worn Fleet Street prank is to send out a newly-joined photographer with instructions to call at the Bank of England and obtain a picture of a Euro-dollar.

For the past eight months, the 57-year-old chairman and managing director of J. Sainsbury group has been going round the country talking to NHS staff—and invariably opening the conversation by asking: "Would it not be better thus . . . ?"

"It's been very enjoyable meeting a new professional group," Griffiths tells me. "There have been a lot of relaxed discussions. I have always believed that each organisation or company is unique, and you have to pay attention to its uniqueness."

But he is certainly not stranger to the medical profession. Two of his children are medical students and he has seen his wife as a doctor.

Griffiths' inquiries were made in his spare time, while continuing to hold down his job at Sainsbury's. The 24-page report, written as a letter to the NHS, was drafted on his annual holiday.

Wading through past reports, he says he found many had recommended sensible action.

"But who was there to act on it?"—hence his own recommendations for the appointment of chief executives or general managers.

Griffiths' background has been the first to formalise the existence of this shadowy market (conducted over telephones and teleprinters) by describing it in print.

On October 24 1980, when he was City Editor of The Times, and after reading a law at Oxford, qualified as a solicitor.

After a stint at Monsanto and further study at Columbia Business School, he joined Sainsbury in 1983—and he wants to stay there.

Amid the rumours already rife about who will be the NHS's first chief executive (around £60,000 a year), one

the Oxford English Dictionary. If any readers know of earlier public references to the Euro-dollar market I would be interested to know. But there's no need to send me any Euro-dollars.

We old hands know that the Euro-dollar is a currency which prefers to blush unseen, although the market in it is now worth nearly \$2bn (expressed in U.S. dollars).

But beyond that sparse information Bond is showing quite uncharacteristic reticence by saying nothing. He expects everything to be sewn up within a few weeks.

Over lunch in London yesterday he became positively Delphic when quizzed about possible plans to invest in Britain, saying only: "I will be in the UK before five years."

Bond's arrival in this end of the week will be the signal for a renewal of the America's Cup all-Australian race, a relationship which had suffered a lull lately because of national exhaustion. Australia is expected to once again be "listing happily" if I may borrow the immortal phrase of our correspondent there, Michael Thompson-Noel.

"But Alan," I asked, "why was your keel so effective? Was it the way it sloped or was it those secret winglets?"

He looked me in the eye. "There's something that everyone has missed. It was heavier than conventional keels right down at the bottom where the weight did most good."

Can he have as simple as that? Or is he indulging the Australian national sport of teasing the Poms . . . ?

### Bond's word

For a man devoted to high-speed living—as demonstrated by his yachting and his business growth—Australia's English-born hero Alan Bond is certainly taking his time about returning to his adopted city, Perth Western Australia.

A full month after his Australia II lifted the America's Cup he is still dashing about the northern hemisphere concluding a big deal for his Bond Corporation. It is

well advised to keep clear of this concern."

### Off beam

## BRITISH CONSUMER SPENDING

# The boom that refuses to die

By David Churchill, Consumer Affairs Correspondent

FATHER CHRISTMAS may have arrived a little early this year—although given the unpredictability of the British consumer, few retail chiefs are prepared to bet on it. Their confusion is caused by the sudden sales surge in September, revealed in last week's official figures, after a long hot summer when it seemed that the past year's consumer boom was petering out.

"I can't understand where all the money is coming from," says Mr David Johnson, chief executive of the Rumbelows electrical goods chain, whose view is echoed privately by many other retailers.

Certainly, there are plenty of paradoxes at present: building society receipts are at record levels, while official figures show that the ratio of savings to earnings is at an historically low figure. Unemployment continues to rise, yet spending in some of the most depressed parts of the country remains remarkably buoyant for such non-essential items as colour televisions and video cassette recorders.

The current crop of bumper first-half figures from leading retailers—and there are more to come in the next few weeks—shows the pace at which profits can accelerate once consumers start spending and why many stores groups are so happy at the moment.

So has the Christmas spending surge actually started as some retailers—such as Selfridges in London's Oxford Street—suggest? No, say Boots which is one of Britain's largest Christmas gift retailers. "We still expect it to start at the usual time of about five to six weeks before Christmas," says Mr Terry Curry, joint managing director of the Curry's chain. British Home Stores agrees—Mr Roy Burgess, the group's managing director, suspects that the start of the real spending spree may actually be getting later rather than earlier.

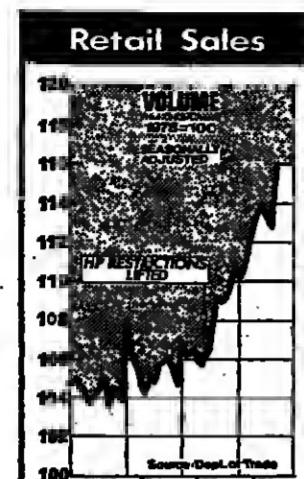
The biggest "rogue factor" so far this year has been the weather with the change from monsoon, to heatwave, to frost, to Indian summer. Clothing and footwear sales have soared in these changeable conditions, while furnishings and some durables seem to have been held back by the hot weather, especially during August. (Yet another paradox: shop sales were down during the heatwave, but consumers flocked instead to car showrooms and bought a record number of new cars.)

When the back-to-school sales—which are very big for us—failed to materialise at the end of August, our buyers were ready to jump out of the window," says Mr Burgess of BHS. "But within two weeks, after the weather changed, we had achieved our sales target for back to school clothes and they were laughing."

He believes that consumers are more likely now to wait until they actually need a purchase before they buy—hence the reluctance to buy winter clothes for children returning to school in the middle of a heatwave.

But it is by no means just the weather which has kept the consumer boom alive:

- The black economy may be a bigger feature than has been recognised so far in boosting sales, especially in depressed areas of the country.
- The impact of this last factor is still puzzling many retailers. "It must be a significant factor now," suggests Rumbelows' Johnson, but Mr Curry says he has no hard evidence to support the suggestion that it is growing.
- Earnings are still ahead of inflation and the level of pay settlements in the current round of pay deals should keep them that way throughout the winter.
- Consumers appear less inclined to save and, instead, have a "marked propensity to spend at the moment," according to Mr Nick Bubb a stores analyst



Company	The Profits Picture			
	Pre-tax interim profits (£m)	1983 (£m)	1982 (£m)	% change
Home Charm	2.5	1.1	+127.3	
Woolworth	(6.3)	(18.7)		
John Menzies	2.45	1.25	+96.0	
Combined English Stores	0.02	(2.64)		
Superdrug	2.88	2.26	+27.7	
Grattis	(0.84)	1.0		
Harris Queenway	2.16	4.25	+110.4	
House of Fraser	4.3	(1.4)		
Currys	4.4	2.9	+64.1	
Freemans	4.57	3.15	+45.3	
Sears	59.3	33.4	+77.5	
Austin Reed	1.12	0.83	+35.1	
Debenhams	5.17	1.54	+285.7	
British Home Stores	14.35	10.85	+32.3	

Source: Capel-Cure Myers

at stockbrokers Scrimgeour Kempt-Gee.

Much of the boom is being financed on credit. Both credit card purchases and hire purchase commitments have risen sharply. Mr Brian Bailey, director of the UAPT (Info-link credit reference agency), says "there were 3.6 per cent more requests for consumer credit facilities in September than the same month last year—which itself was a bumper month following the end of hire purchase controls."

The black economy may be a bigger feature than has been recognised so far in boosting sales, especially in depressed areas of the country.

The impact of this last factor is still puzzling many retailers. "It must be a significant factor now," suggests Rumbelows' Johnson, but Mr Curry says he has no hard evidence to support the suggestion that it is growing.

Mr Burgess notes that several firms' cordless telephones have been sold to customers who pay entirely in cash. One woman apparently told the sales assistant that she had no intention of buying a phone at all when she came into the store—and then paid in notes," he said. He suspects that the underground economy is indeed more important than

However, many City retail analysts are becoming less sanguine about how long a credit-fuelled consumer boom can continue. "People can't go on paying more and more by credit," says Mr John Richards of Capel-Cure Myers, a well-known City retailer.

The willingness of consumers to go on spending in spite of direct experience of redundancy—either through knowing a friend or relative who has lost their job or even facing the threat themselves—suggests that some fundamental shifts in consumer behaviour may now be underway.

Researchers at the Allen Brady and Marsh advertising agency have this week published their study of the effects of the recession on spending patterns. They argue that

"qualitative and quantitative research on people's attitudes during this recession confirms that a new, hedonistic streak is appearing in attitude and behaviour."

On the whole, the researchers conclude, consumers believe that their standard of living has improved over the last few years and that it will continue to do so—in marked contrast to the pessimism of the mid-70s. This optimistic attitude may explain the continued expansion of discretionary spending and also the decline in savings," they add.

Mr Bubb of Scrimgeour Kempt-Gee also floats the idea that the retail market may actually be expanding. "Consumers are being presented with new ideas—video cassettes, recorders—and with new opportunities to spend, such as in the new style fashion multiples," he points out. "In addition, all these retailing ideas are being better packaged because of an ever increasing awareness of design by retailers."

Another possible motive force for extra spending—identified by Mr Richards of Capel-Cure Myers—is that the home is becoming the focal point for entertainment and therefore spending. The "siege" mentality of the 80s suggests that more people are eating, viewing and entertaining at home because of cost and convenience.

In the 52 shopping days left before Christmas, however, most retailers are fairly confident that there is little to distract consumers from making this an extremely buoyant Christmas in terms of the level of spending. ("Probably also a best-seller in December would stop them spending now," quips one retailer.)

But next year the picture is less rosy. Few retailers are really optimistic about any fresh stimulus—such as significant tax cuts—in order to boost confidence and spending. Yet the consumer has shown more than once this year just how fickle he or she can be in deciding what and when to buy.

Most retail buyers, now busy planning for 1984, would give a lot to know how fickle

the consumer will be in 1985.

Given that nuclear power would not have become commercially attractive without the substantial public R and D assistance it has received, now that the electricity authorities are enthusiastic about the technology, why continue funding fission R and D by parliamentary vote?

Why instead should not the various bodies which work to commercial discipline, BNFL, the electricity boards and the National Nuclear Corporation, and possibly the Nuclear Installations Inspectorate as the regulatory authority, now assume responsibility for all, or at least most, of fission R and D?

The UKAEA's role can also be considered in terms of Lord

## U.K. Atomic Energy Authority

# Too high a price for too little return

By Roger Williams

set alongside the fact that only some 15 per cent of electricity is currently of nuclear origin, and only some 25 per cent is expected to be by 1990.

Precisely because the Authority is high powered and of long standing, it is likely to have no difficulty putting forward scientifically sound R and D projects.

But a serious concern must be that the scale and quality of employment it can offer, will tend to draw more of the best brains into the nuclear field than could be justified either by the present state of industrial R and D in Britain (the DTI's expenditure on R and D in 1982-83 came to

"principle," the principle that for R and D with a practical application there should be a distinction between customer and contractor.

Now, the UKAEA is a constitutional anomaly—a kind of half-way house between a government department and a nationalised industry—and it appears that because the Authority is regarded by the Treasury as part of a government department, the customer-contractor principle has not yet been applied to it. That is, the Energy Department, the only possible "customer" as regards the UKAEA's vote expenditure, does not set one and indeed is not in a position to do so.

In the early years, the UK AEA's economy was inevitable but it is not clear that this economy remains appropriate in 1983.

Nor can putting on the UK AEA Board part-time members from bodies such as the CEGB, NNC or BNFL guarantee the appropriateness and scale of the Authority's activities, since it is very much in the interest of these bodies to have as much R and D done by the Authority as possible, since this costs them nothing yet strengthens the overall base for nuclear power.

The Authority has been examined many times by Committee Select Committees but to little effect.

In 1982 the Authority and the Energy Department commissioned consultants to review the efficiency and economy with which the Authority uses the resources available, but these consultants were told "not to study the overall level of the Authority's vote funded R and D expenditure nor its distribution."

The objectives which the Energy Secretary indicated in June 1983 he had set the Authority also do not address directly these questions. It seems fair to ask whether after 30 years it would not now be desirable to have an independent top level committee examine again the institutional arrangements for nuclear R and D much as did the Weverley Committee in 1953, in a review which led directly to the creation of the Authority.

Roger Williams holds the Joint Chair in the Department of Government and Science and Technology Policy at the University of Manchester.

## Letters to the Editor

## Investment in the retailing industry

From the Managing Director of Attitude Research

Sir—I read with interest Dominic Lawson's "Comment" (October 24) that the Government continually denies the retail industry any financial support to further its (that is the Government's) goals. In support of this view he claims that there is mounting evidence that the retail industry is investing in areas of high and stable disposable income. It is hard to see how this claim either furthers his case or justifies any support for the industry.

Logica offer for sale by tender

From Mr John Heller

Sir—I read with interest Dominic Lawson's "Comment" (October 24) and, in particular, his novel suggestion that the company should have offered the shares with no minimum price, and thus avoid the expense of underwriting.

Leaving aside the question of underwriting, it is difficult to see how Mr Lawson's suggestion can be reconciled with the requirement imposed by the Fourth Schedule to the Companies Act 1948 to state in a prospectus the minimum amount which, in the opinion of the directors, must be raised by the issue to provide for the purchase price of property, preliminary expenses and commissions, repayment of borrowings and working capital.

As Section 47 of that Act prohibits any allotment of shares unless such minimum amount is subscribed, the simple arithmetic of dividing such minimum by the number of shares being offered by the company will produce an effective minimum subscription price which, in any event, must be not less than the par value of the shares.

John Heller,  
76 Jermyn Street, SW7.

Biting the hand that feeds you

From Mr Phillip Oppenheim, MP

Sir—I was slightly surprised to find, tucked onto the end of a perceptive article on the effects of new technology on employment, a somewhat specious and ill-informed attack on British farmers by Samuel Brittan ("Farm Support Standoff," October 13).

To suggest, for example, that prices paid by the consumer are equivalent to prices paid to the farmer is patently misguided. In addition, it is quite incorrect

to state that UK prices are one and a half to three times world market levels. It is interesting to note that UK food prices have risen at a lower rate than prices generally over the past decade.

In fact, over this time, farmers' incomes have risen much less than those in the manufacturing industries. From a growth of 6% in 1973, agriculture has been able to save business by pushing up production, despite rising costs. Over the past 10 years, for example, the price of tractors has quadrupled and that of fertilisers has risen almost as much while the price of grain has barely doubled. The result of the ever-increasing pressure to produce more is that the volume of agricultural production has more than doubled since the war, despite gradual loss in farmland.

Britain is more self-sufficient now than she has ever been over the past 50 years. She produces over 60 per cent of what she consumes compared with 30 per cent 40 years ago, and imports only 20 per cent from outside the EEC. This represents a saving in excess of £2bn on the balance of payments in 1982.

Another error made in Mr Brittan's article is that farmers have benefited from the rise of land values. To state that land values have doubled in real terms over the past decade is simply wrong. Most estimates put forward show values, at best, keeping pace with inflation.

Mr Brittan also talks of the destruction of the countryside, mentioning the pulling down of hedgerows—something we hear much of these days. Doubtless Mr Brittan will remember from his schoolboy history lessons that when hedgerows were first put in 400 years ago, complaints—even riots—occurred. A little historical perspective here might be useful. A quick trip into the country would soon show Mr Brittan that the much deprecitated

## Creating a true Common Market

From Mr Christopher M. Jackson, MEP

Sir—Did your headline "EEC trade ministers back initiative to cut world trade barriers" (October 18) have a touch of irony? For behind the worthy decision to do something relating to the outside world lies the fact that by the same measures to accomplish a task that lies solely within their own powers, namely, creating a true EEC common market.

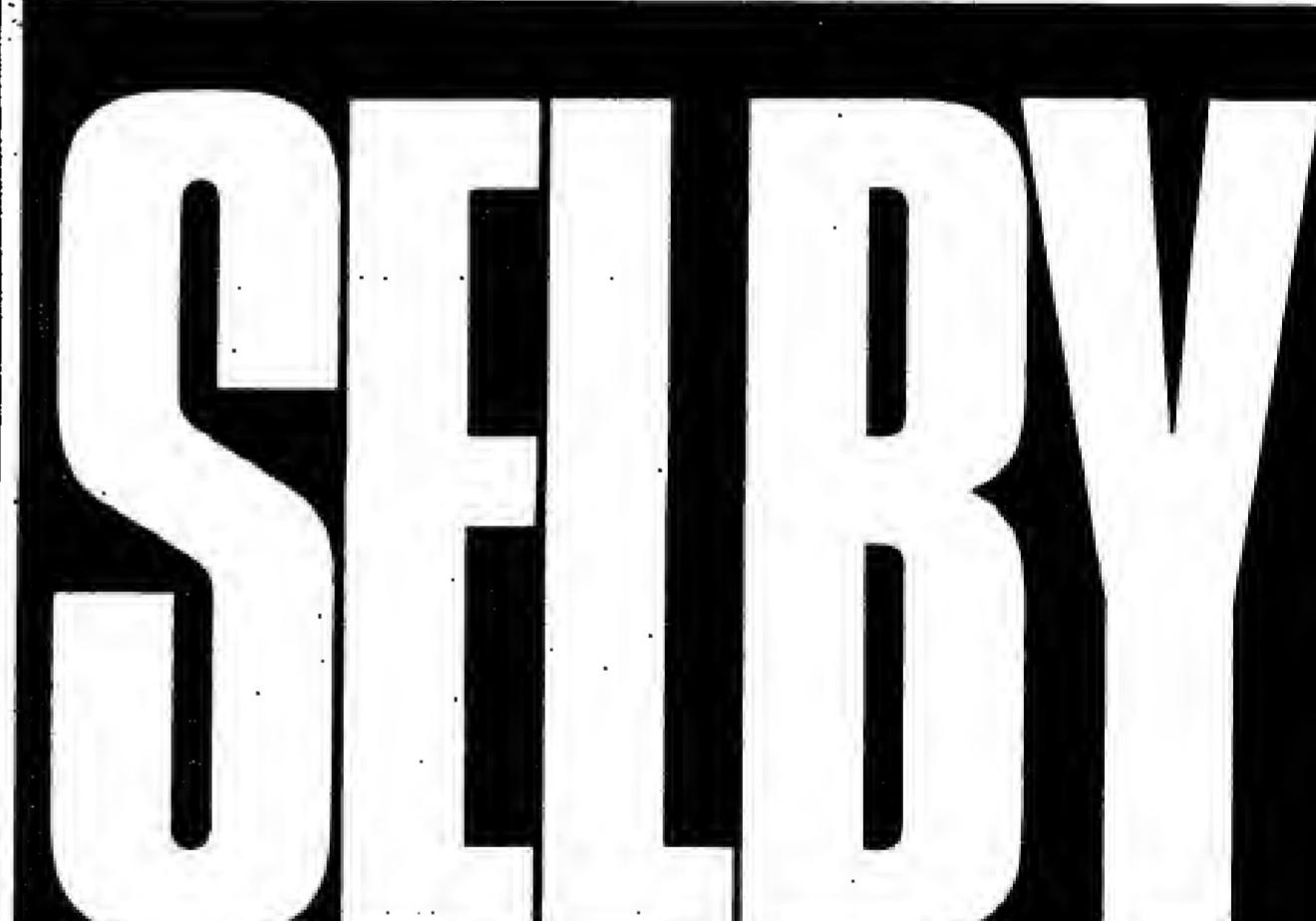
The trade ministers were ordered by the heads of government meeting in Copenhagen last December to make substantial progress in reducing trade barriers within the EEC, as this could make a vital contribution to improving the economic health of Europe, strengthening our industrial base and reducing unemployment.

Strenuous efforts towards this aim were largely wrecked on the prickly intransigence of one Member State or other. This sort of "non-Europe" as it was dubbed in the recent Albert Hall report on the prospects for European economic recovery, is extremely costly to our citizens in terms of lost wealth.

Commissioner Etienne Davignon remarked recently that Europe will only have a future to the extent that she is prepared to accept some disciplines. The key to the problem of discipline lies in the Council of Ministers' practice of unanimous voting. I find it hard to imagine any country, business or even parish council that would make adequate progress if its 10 decision makers regularly insisted on unanimous agreement before acting. Yet this is the way Europe muddles along.

What can be done? While still leaving the final decision on what is a "vital interest" to the state concerned, there need to be some changes in the way civil servants or ministers from different countries act. One interesting proposal involves the head of government personally. If, following an initial council declaration of "vital interest," a unanimous decision could not be reached within, say, 12 months, the claim for unanimity could only be maintained by the head of government personally or the European Council.

If this variant on the Luxembourg Protocol (which in any case records a disagreement) could winkle out some of the "fake" vital interests which hold up Europe's progress it would be worth a try.

Christopher Jackson,  
MEP for Kent East,  
MEPs,  
Medway,  
Sevenoaks, Kent.

RICCALL  
GASCOIGNE WISTOW  
NORTH SELBY  
**Cementation Mining**  
Mine Design. Shaft Sinking. Tunnelling.  
Feasibility Studies. Grouting. Shotcrete.  
Project Engineering. Freezing. Storage Caverns.  
Cementation Mining Ltd., Bentley House, PO Box 22, Doncaster, South Yorkshire, England.  
Affiliates: Johannesburg, Melbourne, Tucson, Kitwe, Bombay, Toronto.



**International Commercial Banking**  
BNP  
UK 01-626 5678

## SECTION II - COMPANIES AND MARKETS

# FINANCIAL TIMES

Wednesday October 26 1983

Fine British Clothes for men...  
**centaur**  
ELEGANTLY STYLED IN  
Pure new wool

### Merrill Lynch suffers sharp fall

By Terry Dodsworth in New York  
MERRILL Lynch, the largest U.S. securities group, suffered a sharp drop in earnings in the third quarter as it felt the effects of increased spending to cope with its recent expansion.

Revenue remained steady at \$1.3bn, but net earnings plunged from \$100.3m a year ago to \$33.1m, or 37 cents a share. Transaction volume was up only moderately from the September 1982 period, when the bull market was in an extremely vigorous phase, and fell below the level of this year's first half.

In the meantime, however, Merrill Lynch had geared up its staff levels and this combined with some increase in pay, pushed up personnel expenditure by 26 per cent compared with last year to \$537m.

Other expenses went up by 29 per cent to \$371m, reflecting higher office and equipment rental, and costs for advertising and market development. The group also took a \$12m pre-tax charge connected with the default of C and R Pastor, a securities dealer now in bankruptcy.

Compared with a year ago, revenues other than interest rose by 6 per cent, largely reflecting gains on commission and real estate income, with equity market activity remaining higher than a year ago, but fixed income held down by flat interest rates.

Over the nine months, revenue rose from \$3.4bn to \$4.3bn, while earnings were up to \$272m or \$2.00 a share against \$166m.

### Further loss for Wheeling Pittsburgh

By Our New York Staff

WHEELING - PITTSBURGH, the eighth largest U.S. steel company, reduced its net loss in the third quarter of this year, to \$9.8m against \$26m in 1982, although the latest figures include a \$11m non-recurring gain from the sale of tax benefits.

Steel shipments for the quarter rose by 17 per cent from 365,000 tons to 393,000 tons, but sales nevertheless slipped from \$194m to \$188.7m.

Mr Dennis Carney, chairman, said that the lower turnover on the increase in shipments this year reflected the impact of severe discounting. He added that there had been an improvement in the volume of orders for the fourth quarter and that there were good prospects which could continue into the first quarter of 1984.

Over the first nine months, losses more than doubled from \$25.5m to \$32.2m, while sales fell to \$531m compared with \$568m.

### Profits plunge at Paradyne

By Our New York Staff

PARADYNE, the fast growing manufacturer of computer communications equipment, which has been charged by the Securities and Exchange Commission with using fraudulent means to win a major contract, has reported a sharp drop in its third-quarter profits with net income down from \$7m to \$0.6m.

The company says that the results continue to be affected by lower than expected product deliveries, higher operating expenses and \$700,000 in legal costs relating to the defense of the SEC suit against the company.

Revenues fell 3 per cent to \$30.3m in the latest quarter but the company says that orders and customer activity both at home and abroad continued to improve in the quarter, bolstered by the introduction of a new family of high speed models.

For the first nine months Paradyne's net income totalled \$5.4m against \$19.4m. Revenues are 5 per cent higher at \$133.6m.

### Kvaerner sees little change

By Fay Gieseck in Oslo

KVAERNER, the Norwegian ship and platform building and engineering consultancy group, expects profits of around Nkr 350m (\$49m) this year - little changed from last year's pre-tax figure of Nkr 351.4m. Sales are expected to reach about Nkr 4.8bn, compared with Nkr 4.4bn in 1982.

The group's eight-month report showed both sales and profits up on the same period last year. Sales reached Nkr 2.7bn against Nkr 2.43bn in January-August 1982, and pre-tax profits - including Nkr 30m extraordinary credits - totalled Nkr 201m.

### Power play behind MAN's recovery plan

John Davies in Frankfurt charts the decline of a West German industrial group

MAN, the West German truck and engineering group, enjoyed a reputation for years as a gem within the GHH manufacturing realm. Today the gem has lost some of its glitter, because of problems in markets for heavy trucks, marine engines and general engineering.

The fading fortunes of MAN, Maschinenfabrik Augsburg-Nürnberg, have touched off a power struggle among key figures anxious to influence its strategy.

MAN is by far the weightiest segment of GHH, Gutehoffnungshütte, a wide-ranging group which traces its origins back to Germany's 18th century framework. Crucial discussions on personnel and policy are expected at top-level meetings of both GHH and MAN next month.

Four of the top protagonists in the power play are:

• Dr Manfred Lennings: Aged 49, he has been chief executive of GHH for eight years and is regarded as one of West Germany's top industrialists. He has offered to resign after opposition from leading shareholders to his plan for MAN, which is more than 75 per cent owned by Allianz.

In addition to managing GHH, Dr Lennings is chairman of the MAN supervisory board. Under West Germany's two-tier system of company control, the supervisory board exercises a remote but sometimes decisive role in overseeing the activities of the management board.

Dr Lennings called for plans to enable him to move in actively as MAN's chief executive for up to a year to push through a recovery plan.

In keeping with GHH tradition, Dr Lennings had tended to allow a loose rein to executives at MAN, in

view of the size and range of both groups' activities. Dr Lennings, moreover, is identified with the old industrial heartland of north-west Germany (although he studied business administration in Munich), while MAN's power centres are in staunchly independent Bavaria.

As its problems grew, MAN cut its dividend after earning lower profit in the 12 months to June 30, 1982, and then suffered a DM 300m (\$15.3m) operating loss on group sales of DM 8.8bn in 1982-83.

MAN's setback is one of the reasons why GHH, with group sales of DM 15.7bn, cut its dividend last financial year.



Rivals for the key role at MAN - Dr Lennings (left) and Herr Lichtenberg

MAN executives indicated that half the loss came from the commercial vehicles division, whose sales revenue dropped DM 1bn to DM 2.8bn. With domestic and export markets shrinking, MAN's truck sales fell a third to only 18,000, and bus sales fell 17 per cent to 2,400.

However, MAN claims to have turned the corner already in its truck operations, because of a revival of the West German market and rationalisation measures, including job losses.

As a result, Herr Wilfried Lotke, the trucks chief, has predicted that the commercial vehicles division

may lift revenue 20 per cent to DM 3.3bn and sharply reduce its losses this financial year.

On the other hand, he sees no immediate revival in exports, which used to make up 60 per cent of MAN's truck sales and now comprise only 45 per cent.

MAN, which employs just under 60,000 workers in its entire group, including 50 per cent owned subsidiaries, has been steadily cutting its truck assembly workforce - from 21,500 in 1980 to a planned 16,000 by mid-1984.

The company recently announced structural changes aimed at stronger concentration of heavy truck assembly in Munich. Its Salzgitter plant will concentrate on assembly of buses, special vehicles, medium-weight trucks and the smaller MAN-Volkswagen joint venture trucks.

In its diesel engine division, MAN has suffered from the world slump in shipbuilding and a decline in orders from oil-producing countries. Competition from Japan has also hit profitability.

MAN has reacted by closing its Hamburg diesel works and putting workers on short time at its plant at Augsburg in Bavaria. Job losses have long been rumoured at Augsburg and confirmed recently.

In its general engineering operations, MAN has been hit by declining orders from developing countries, which have cut ambitious plans for industrial installations because of payments problems.

One of the relatively bright spots, however, has been the MAN-Roland print machinery operation, which increased its quarterly dividend from 35 cents a share to 37 cents a share.

The parent company reported steady sales revenue last financial year, although including the U.S. operation revenue was down slightly at DM 657m.

Abroad, MAN has suffered some severe setbacks, with the failure of its Argentine diesel engine project and problems in sales and servicing branches for trucks in Australia and France. It is also embroiled in a dispute with Arab partners in a Middle East transport-leasing business.

Managers and shareholders, therefore, have been investigating prospects for a new, long-term strategy, possibly involving foreign partners.

MAN has assured its Augsburg workforce that the plant will continue to make marine engines, but it has confirmed that it is studying the possibility of closer co-operation with its Danish subsidiary, B & W Diesel, acquired in 1980.

One criticism directed at MAN is that it has failed to adjust fast enough to structural changes in market conditions. While it has tried to postpone harsh adjustments, it has conveyed an impression of indecisiveness.

Doubts have also arisen about the tightness of managerial control and about the economics of its truck operations.

The MAN supervisory board is due to consider the 1982-83 loss on November 11, three days after the GHH supervisory board's meeting. The manoeuvring of top managers and shareholders is expected to be reflected in decisions of these crucial meetings.

### Warner Lambert profits up 16%

By Paul Taylor in New York

WARNER-LAMBERT, the U.S. pharmaceuticals and medical equipment company, yesterday reported a 16 per cent increase in third-quarter earnings, helped by higher over-the-counter and prescription drugs sales in the U.S. The rise offset a decline in worldwide sales caused primarily by unfavourable foreign exchange rates.

The company said net income in the latest quarter increased to \$50.4m or 63 cents a share from \$42.5m or 53 cents a share in the 1982 third quarter. The board voted to increase the quarterly dividend from 35 cents a share to 37 cents a share.

Sales during the quarter fell to \$773m from \$840m, but the company said that, excluding the effects of the divestiture of Entemann's, the bakery subsidiary, in October last year and foreign currency rate changes worldwide, sales increased by 7 per cent.

The company also said that net income, excluding the effect of currency translation, which cut 9 cents a share off earnings in the latest quarter and 19 cents a share off the 1982 quarter, and the Entemann's divestiture, increased by 6 per cent.

For the nine months the company reported net earnings of \$152m or \$1.90 a share on sales of \$2.32bn, compared to net income of \$133.3m or \$1.67 a share on sales of \$2.49bn in the same period last year.

### Mack Trucks edges back to surplus aided by stock gains

By OUR NEW YORK STAFF

MACK TRUCKS, the U.S. manufacturer of heavy lorries in which Renault of France has a 45 per cent stake, made a slim \$30.9m net profit in the third quarter against losses of \$14.4m in the same period of last year.

The results were helped by stock profits of \$4.9m for inventory replacement at costs lower than current replacement costs. In addition, interest payments fell, and investment income increased.

Mack recently sold 3.3m shares in a public offering in which the Signal Group, its former owner, also offered 11.7m shares. As a result, Signal's stake has now been reduced to 10 per cent.

### Microprocessor research boost

By DAVID BROWN

SWEDENS Industry Minister, Mr Thage Peterson, has put forward what he called "one of the most important political proposals yet" - a five-year SKr 714m (\$91.6m) development programme for advanced microprocessors.

Government aid will be mainly directed at two companies, one owned by Asea, the electrical power and engineering group, the other by Ericsson, the telecommunications company, said ministry officials.

The development and production of microelectronics is of decisive importance to our position as a first-ranking industrial nation," Mr Peterson said.

The plan is set against a growing

market for custom-built, rather than standard microchips. They now make up only a fifth of the world market, but this is expected to treble by 1990, officials said.

The move, made as the Government is preparing a range of controversial cuts and tax increases, aims to reduce Sweden's strategic dependence on foreign sources of supply, said officials.

Sweden has the highest density of industrial robots per industrial worker, and its public sector, banking and post offices make extensive use of computer technology. It currently imports 80 per cent of microchip requirements, mainly from the U.S. and Japan. Hafco, owned by

Asea, and Rito, a subsidiary of Ericsson, account for the remainder.

Ministry officials said Asea's high voltage direct current power transmission and Ericsson's Axe digital telephone exchanges are areas where custom-built microprocessors can be used. They are also said to be vital in Sweden's aerospace sector, and in the new JAS-39 multi-role military aircraft - at SKr 24.9bn (1981 prices) the biggest defence contract awarded to Sweden.

The proposal, yet to be passed by the Riksdag (parliament), calls for an initial funding of SKr 44m for 1984.

In last year's third quarter, the company also reported a \$16.7m profit on the sale of assets, but before adjusting for these non-recurring items, last year's loss, at \$47.5m, was less than half the

\$99.4m recorded in the 1982 third quarter.

Mr Paul Tippett, chairman, said however, that the group expected to make a modest profit in the final quarter. Heavy truck costs had made a significant dent in the third quarter figures, but these were now largely behind the group, and both the new jeep and the Renault Encore had received good customer reception.

Sales in the quarter rose by 21 per cent to \$775.5m. Over the nine-month period, turnover increased from \$1.7bn to \$2.2bn, while net losses rose to \$154m from \$150m.

An earlier leveraged bid of \$63 a share was made for Hyster in early September by Kohlberg Kravis Roberts, the New York investment specialists. But KKR's offer, while not worth in cash, included \$5 a share of preferred stock.

Hyster's management reacted favourably to the proposals from KKR, which offered senior executives a stake in the equity of the buy-out company. The offer was also substantially above the stock market price of \$51 a share, and its net worth then at \$20m.

In a leveraged bid, financing is largely in the form of debt, which is being arranged for the Hyster offer by Morgan Guaranty Trust, acting for a group of banks and financial institutions. These proposals will now be studied by a special committee established by Hyster to evaluate the KKR offer, and which has hired the investment banking firm Dillon Read to help with the examination.

Hyster, whose shares rose by \$5 yesterday morning to \$65, is currently emerging from a two-year period of rationalisation in which it has halved its worldwide labour force to 4,500.

Coleco suffers \$2.3m fall as sales slide

By Terry Dodsworth in New York

COLECO INDUSTRIES, the U.S. video game and small computer manufacturer, suffered a heavy setback in the third quarter, when earnings fell to \$2.5m, or 14 cents a share, against a record \$17.6m in the same period last year.

Sales also dropped steeply, declining by 31 per cent from \$185.5m to \$114.5m, and the company confirmed that its original targets for the shipments of its new Adam computer would not be met in the important pre-Christmas period.

Coleco put the main blame for the slide on its performance in reduced sales of software for the Atari and Mattel ranges of computer games, along with a line of table top arcade games introduced in 1982. Both Atari and Mattel have sunk deep into losses over the last nine months as the computer game market has taken a massive hit.

For the first nine months, Coleco's sales were up by 37 per cent from \$307m to \$421m, while earnings in the same period slipped from \$28.5m to \$27.5m or \$1.45 a share.

### Rival bid for Hyster from Esco

By JOHN DAVIES IN FRANKFURT

A RIVAL leveraged buy-out proposal for Hyster, the U.S. fork lift truck manufacturer, was launched yesterday by Esco, the company's largest shareholder.

Esco, a private manufacturer of earthmoving equipment and steel castings, already owns 19.7 per cent of Hyster, which it helped to launch in 1979. In an all-cash bid, it is offering \$69 a share for the 4.8m Hyster shares which it does not own, valuing the company at \$420m.

Sales in the quarter rose by 21 per cent to \$775.5m. Over the nine-month period, turnover increased from \$1.7bn to \$2.2bn, while net losses rose to \$154m from \$150m.

An earlier leveraged bid of \$63 a share was made for Hyster in early September by Kohlberg Kravis Roberts, the New York investment specialists. But KKR's offer, while not worth in cash, included \$5 a share of preferred stock.

Hyster's management reacted favourably to the proposals from KKR, which offered senior executives a stake in the equity of the buy-out company. The offer was also substantially above the stock market price of \$51 a share, and its net worth then at \$20m.

In a leveraged

## INTL. COMPANIES &amp; FINANCE



## Transmediterranean Pipeline Company Limited

US\$ 130,000,000

Medium-Term Loan

Guaranteed unconditionally and severally by

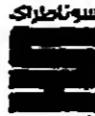


Snam

and

Sonatrach

for the



## Algeria/Italy Transmediterranean Gas Pipeline Project

Lead managed by

Arab Petroleum Investments Corporation (APICORP) Banca Commerciale Italiana  
 Bank of America International Limited Bankers Trust International Limited Banque Indosuez  
 Banque de la Société Financière Européenne - SFE Group / The Sumitomo Bank, Limited  
 Credit Lyonnais Gulf International Bank B.S.C.

Istituto Bancario San Paolo di Torino The Long-Term Credit Bank of Japan, Limited

Managed by

Arab Banking Corporation (ABC) The Arab Investment Company S.A.A. Banca Popolare di Milano, Milano  
 Banco di Sicilia Credito Italiano The Fuji Bank, Limited Italian International Bank Limited  
 Kuwait Foreign Trading Contracting & Investment Co. (KFTCIC) The Mitsui Trust and Banking Company, Limited  
 National Bank of Bahrain B.S.C. The National Bank of Kuwait S.A.K. Sanwa Bank Merchant Banking Group

Provided by

Arab Banking Corporation (ABC) The Arab Investment Company S.A.A. Arab Petroleum Investments Corporation (APICORP)  
 Banca Commerciale Italiana Overseas Limited Banca Popolare di Milano, Milano Banco di Sicilia Bank of America (Jersey) Limited  
 Bankers Trust Company Banque du Commerce S.A. Banque Indosuez Caisse d'Epargne de l'Estat Banque de l'Estat Luxembourg  
 Credit Lyonnais Credito Italiano, London Den norske Creditbank The Fuji Bank, Limited  
 Genossenschaftliche Zentralbank AG, Vienna Gulf International Bank B.S.C. Istituto Bancario San Paolo di Torino, London  
 Italian International Bank Limited Kuwait Foreign Trading Contracting & Investment Co. (KFTCIC) The Long-Term Credit Bank of Japan, Limited  
 The Mitsui Trust and Banking Company, Limited National Bank of Bahrain B.S.C. The National Bank of Kuwait S.A.K. The Sanwa Bank, Limited  
 SFE Banking Corporation Limited - SFE Corp The Sumitomo Bank, Limited UBAN International Limited Union Méditerranée de Banques

Coordinator  
Crédit LyonnaisAgent  
Bank of America International Limited

September 1983

*This advertisement complies with the requirements of the Council of The Stock Exchange.*

## Royscot International Finance B.V.

*(Incorporated with limited liability in the Netherlands)*

U.S. \$75,000,000

11% per cent. Guaranteed Bonds due 1993

with Warrants to subscribe

U.S. \$75,000,000

11% per cent. Guaranteed Bonds due 1993

both series of Bonds being unconditionally and irrevocably guaranteed as to payment of principal, premium and interest by



## The Royal Bank of Scotland Group plc

*(Incorporated with limited liability in Great Britain and registered in Scotland)*

The following have agreed to subscribe or procure subscribers for the Bonds:-

Samuel Montagu & Co.  
Limited

The Royal Bank of Scotland plc

Crédit Commercial de France

Deutsche Bank  
AktiengesellschaftLehman Brothers Kuhn Loeb  
International, Inc.

Morgan Guaranty Ltd

Nomura International  
LimitedJ. Henry Schroder Wag & Co.  
Limited

First Interstate Limited

Credit Suisse First Boston  
Limited

Kredietbank International Group

Morgan Grenfell & Co.  
Limited

Morgan Stanley International

Orion Royal Bank  
LimitedSwiss Bank Corporation International  
Limited

Williams &amp; Glyn's Bank plc

The 11 $\frac{1}{2}$  per cent. Guaranteed Bonds in the denomination of U.S. \$1,000, issued at 99 $\frac{1}{2}$  per cent., the Warrants, issued at U.S. \$20.00 each, and the 11 $\frac{1}{2}$  per cent. Guaranteed Bonds in the denomination of U.S. \$1,000, which will be issued at 100 per cent. plus accrued interest (if any) on exercise of Warrants, have been admitted to the Official List by the Council of The Stock Exchange, subject only to the issue of the temporary Global Bonds and the Global Warrant.

Interest on both series of Bonds is payable annually in arrears on 15th November, commencing 15th November, 1984.

Full particulars of the Bonds and the Warrants are available in the Exetel Statistical Service and may be obtained during usual business hours (Saturdays excepted) up to and including 8th November, 1983 from the brokers to the issue:-

Laing & Cruickshank  
Incorporating McNally, Montgomery & Co.,  
Piercy House,  
7 Copthall Avenue,  
London EC2R 7BE.

Bell, Lawrie, Macgregor & Co.,  
Erskine House,  
68/73 Queen Street,  
Edinburgh EH2 4AE.

26th October, 1983

## Steel industry in South Africa caught in toils of change

By JIM JONES IN JOHANNESBURG

ECONOMIC RECESSION has not been easy for South Africa's steelmakers. Not only has lower demand led to production cut-backs, but it has obliged managers to make painful reassessments of basic strategies. For many years, it was believed that economic growth in South Africa itself would provide the markets for steady increases in steel production. If the country's own economic growth slowed temporarily, it was a matter of faith that there was the export option to take up the slack.

This recession, though has differed from others. South Africa's economic cycle usually lags behind those of the main OECD countries by about two years. While the country's steelmakers were alive to the likelihood of a domestic economic downturn, most thought that export demand would be advancing as domestic purchases were weakening. This time recession has, however, lasted longer than widely expected, leaving export markets over-supplied and highly competitive, while the domestic market is in decline.

The immediate response of South Africa's steelmakers has been to cut production rates sharply and to introduce cost-saving programmes throughout the industry. More importantly, there have been fundamental changes in attitudes.

The change in management thinking at the state-owned Iscor is perhaps the most instructive. Gone are the days when steady additions to production capacity were an accepted thing. Now the view is that size is relatively unimportant. Iscor's next ten years are to be characterised by strategies based on the belief that only efficient producers operating with little excess capacity will cope successfully with the new steel market. The steelmaker has no immediate major expansion plans, and its marketing emphasis will be on selling to domestic users. As a result, Iscor is likely to have a declining amount of steel available for export as the decade progresses.

Mr Floors Kotze, Iscor's managing director, is confident that the changes now being introduced will put his company's productivity on a par

with that of the West German steel industry within two years. As it is, Iscor's workforce has been cut from over 70,000 to less than 60,000 in just over a year. The concern's liquid steel production reached a peak of 7.1m tonnes in the year ended June 30, 1980, and in the following two years output averaged 7.1m tonnes. The financial year ended last June 30, was, however, the first in which Iscor put into practice the strategy of overhauling its production methods. Production capacity is currently in the region of 6.3m tonnes a year, while in the year just ended output was about 5.8m tonnes.

By mid-1985, when the current R800m (\$715m) modernisation programme is scheduled for completion, Iscor will have closed its least efficient plant and replaced it with more modern equipment.

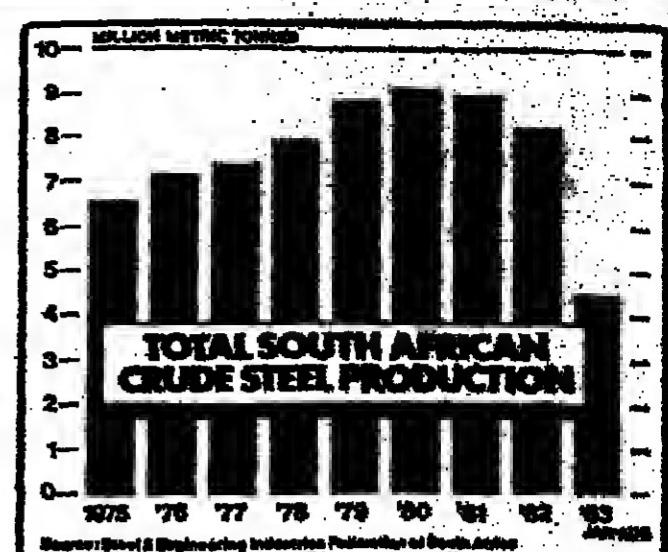
In July this year, Iscor took control of the loss-making Dunswart Steel Company from Gencor, the mining house. As part of this highly controversial deal the steel company gave the mining house control of Samancor, South Africa's largest manganese, chrome and ferro-titanium producer. The deal also gave Iscor ownership of the Hlobane Colliery, which has long been one of its major suppliers of coking coal.

## Recession has re-shaped the sector

While Dunswart has operated with substantial losses for several years it does have the advantage, as far as Iscor is concerned, of owning South Africa's only currently operating sponge iron plant. Ownership of this facility is an integral part of Iscor's modernisation programme.

The shift towards electric arc furnaces has made life difficult for Union Steel. Its steel production is based entirely on scrap conversion and it has been forced by Iscor's developments to build its own sponge iron production facility. This is due to come into production in 1986 at a cost of about R35m. Union Steel is currently operating at about 60 per cent of its sales, at prices reflecting the need to carry overheads.

Iscor's scope for further consolidation of the steel industry is, however, limited. Highveld Steel and Vanadium, the steelmaker controlled by Anglo American Corporation, is struggling with operations running at about two-thirds of capacity, but is most unlikely to



full production capacity, and in 1982 lost R1.1m before tax on its production of 172,000 tonnes of steel. Last year, Unox spent R20m improving and up-grading its plant and equipment. This year, though profits have continued to deteriorate, Iscor's R27m is to be spent on essential capital projects.

Dunswart, when Gencor gained proper control of the company in the late 70s, was faced with trying to make a profit out of plant which had been inadequately maintained, tending an urgent need for modern equipment. But while capital spending on new plant and on improvements of efficiency ran at an annual rate of R20m, Dunswart's operating profits fell steadily from 1980, under the combined pressure of declining sales volumes and increased competition.

This lesson was not lost on Iscor. Dunswart's professed determination was to sell its rolled sections at any price which would make a positive contribution to overheads. This, Iscor felt, threatened to restrain prices over a range of rolled products. Iscor controls Union Steel through that company's voting shares, and as a result Unox will not compete head-on with the state-owned steel company. Dunswart, on the other hand, was reaching the stage early this year at which Iscor's best interests were served by some form of reorganisation in the industry. Losses in the first months of this year were making Dunswart desperate for sales, at prices reflecting the need to carry overheads.

Iscor's scope for further consolidation of the steel industry is, however, limited. Highveld Steel and Vanadium, the steelmaker controlled by Anglo American Corporation, is struggling with operations running at about two-thirds of capacity, but is most unlikely to be followed by the acquisition of a larger and controlling shareholding. Immediately after the Middleplate deal had been concluded, however, Gencor and Iscor made an agreement which would prevent Anglo from taking control of Samancor. Highveld's policies are to a certain extent, those coloured by the attitudes of its ultimate parent. Its strategy, even at this stage of the steel market cycle, is to broaden its product range and to compete toe-to-toe with Iscor.

## Profit and Final Dividend

For the year ended  
30 September 1983

## Profit

The net income after tax and after transfers to internal reserves of the Nedbank Group Limited for the year ended 30 September 1983 amounted to R121.6 million which represents an increase of 37.2% for the year.

Earnings per share for the year under review increased from 100.2 cents to 137.1 cents.

	1983	1982
Taxed income after transfers to internal reserves	121 587 000	88 585 000
Less: Dividends to shareholders	60 347 000	44 217 000
	61 240 000	44 371 000
Raised income brought forward	9 051 000	6 194 000
Surplus on the sale of long-term investments	—	1 540 000
	70 291 000	52 105 000
Less: Transfer to disclosed reserves	61 019 000	43 054 000
Retained income	9 272 000	9 051 000
Fully paid shares in issue	88 690 161	88 417 329
Earnings per share	137.1 cents	100.2 cents
Dividends – paid and proposed per share	68.0 cents	50.0 cents

## Review

The pace of change in the economic and financial environment accelerated and competition intensified during the twelve months. Earlier steps to introduce more market-related methods of regulating the money supply were taken further, exchange control over non-residents was abolished and interest rates fluctuated widely. The companies in the Nedbank Group responded purposefully to the opportunities.

	1983	1982
Taxed income first half year	R44 484 000	R32 810 000
Taxed income second half year	R77 103 000	R55 778 000
Taxed income full year	R121 587 000	R88 588 000

A total dividend of 68 cents will absorb R60 347 000 leaving R61 240 000 to be added to the reserves of the Group.

The manner in which the increase in earnings was achieved, the directors believe, is sound reason for confident optimism. The Nedbank Group is well placed to advance, with the economy, during the next upswing.

## Final Dividend

Shareholders are advised that a final dividend has been declared of 50.5 cents which, together with the interim dividend of 17.5 cents per share, makes a total dividend for the year ended 30 September 1983 of 68 cents per share.

The final dividend will be payable to shareholders registered in the books of the company at close of business on 4 November 1983.

Dividend warrants in respect of this dividend will be posted on or about 25 November 1983.

Non-resident shareholders' tax will be deducted from dividends payable to non-resident shareholders.

The transfer register will close from 5 November 1983 to 12 November 1983. Shareholders who changed their address should notify the transfer secretary immediately.

The Annual General Meeting of Shareholders will be held in Johannesburg on 29 November 1983. At this meeting shareholders will be asked to approve an increase of R50 million in the authorised capital of the company.

## By order of the Board

D.A. Peterson  
Secretary  
18 October 1983  
81 Main Street, Johannesburg  
Marshalltown 2107

NEDBANK  
Group Limited

## INTERNATIONAL COMPANIES and FINANCE

**Barclays Asia sues chairman of Carrion**

BY MICHAEL THOMPSON-NOEL IN SYDNEY

**Barclays Asia**, a subsidiary of Barclays, the UK clearing bank, is suing Mr George Tan, the chairman of the failed Hong Kong property group Carrion, for HK\$87.5m (US\$30m). In a High Court suit, filed on Friday, Barclays Asia said that in April 1982 Mr Tan personally guaranteed a HK\$30m loan facility made available to Carrion Holdings, the privately-owned parent of the Carrion group.

According to the writ, the credit was drawn down on April 26 1982, and has not yet been repaid despite written requests to Carrion Holdings and to Mr Tan. The HK\$87.5m claim includes HK\$7.5m in interest charges.

Carrion Holdings is already the subject of a winding-up petition brought by Bumiputra Malaysia Finance, the Hong Kong arm of Bumiputra Malaysia. A similar petition has been brought by Bankers Trust against Carrion Investments, the group's main quoted company. Provisional liquidators have been installed at both companies.

Total debts of companies in the Carrion group and associated privately with Mr George Tan are estimated at some US\$1.2bn. The largest single creditor is thought to be Bank Bumiputra, owed more than US\$500m.

In its 1982 annual report, Barclays Asia said that its HK\$788m loan book included some loans "which may prove irrecoverable" but which have been guaranteed by its immediate parent, Barclays Bank International. BBI undertook to make good losses on the loans either directly or through subscription of new share capital. While the amount of loan profit covered by the BBI guarantee is not specified in the annual report, it is thought to be some HK\$400m.

Mr Tan is currently free on bail, awaiting trial on a charge brought against him under Hong Kong's theft ordinance. Another Carrion director, Mr Bentley Ho, faces two charges under the theft ordinance, and is also out on bail.

**Malaysian merchant bank improves**

By Wong Sulong in Kuala Lumpur

**ARAB-MALAYSIAN DEVELOPMENT BANK**, the largest of Malaysia's 12 merchant banks, has reported a 68 per cent improvement in pre-tax profits to 20m ringgit (US\$8.6m) for the six months to September. The bank is wholly owned by Dato' Azman Hashim, who said results for the next six months are expected to show further improvement.

Shareholders' funds increased by over 50 per cent to 112m ringgit, loans and advances went up 47 per cent to 1.18bn ringgit, and deposits and borrowings rose 39 per cent to 1.2bn ringgit.

During the period the bank opened its fourth branch, in Kuching in East Malaysia, while its finance company added five new branches to make a total of eight.

The Government's Capital Issues Committee is expected to meet later in the week to decide on the proposal for Dato' Azman to sell off 45 per cent of AMDB to the publicly listed Taiping Textiles.

The proposal is for Taiping to issue 346.5m shares of 50 ringgit each in return for 31.5m shares of 1 ringgit each in AMDB. The proposal has been generally viewed by the market as unfavourable to Taiping, and Dato' Azman said he expected the CIC to revise the terms in favour of Taiping.

This announcement appears as a matter of record only.

**Commercial Paper Program****Banca Nazionale del Lavoro**

Commercial paper rated A-1+ by Standard & Poor's Corporation and P-1 by Moody's Investors Service, Inc.

We served as financial adviser in connection with this program and also serve as the commercial paper dealer.



A.G. Becker Paribas Incorporated

**Delay to BHP acquisition of Utah International**

BY MICHAEL THOMPSON-NOEL IN SYDNEY

THE October 31 deadline for Broken Hill Proprietary's planned US\$2.4bn acquisition of the Utah International resources group from General Electric of the U.S. will not be met. The deal is, however, still expected to be signed before the end of the year.

Delays have been caused by the complexities of BHP's plan to inject Utah's substantial Queensland coal interest into a consortium that would also own BHP's existing mines in Queensland.

The original plan was to merge the mines owned by Central Queensland Coal Associates (CQCA), which is 68 per cent owned by Utah, with those operated by Thiess-Dampier Mitsui Coal (TDM) — which is 58 per cent owned by BHP.

TDM has now been excluded from the enlarged consortium, which nevertheless has an estimated price tag of A\$28.5m (US\$26.2m) for each one per

cent stake.

Varying stakes in CQCA are already held by Utah, Consolidated Mitsubishi Development, and the Australian Mutual Provident Society (AMP).

Neither Mitsubishi nor the AMP is thought to be interested in raising its equity involvement in the proposed consortium, so BHP is likely to take a bigger stake than originally planned, and has been trying to attract new partners to join the consortium.

A BHP spokesman yesterday denied recent speculation that the company had approached the Anglo-American group of South Africa as well as a group of European steel mills.

BHP, Australia's largest company, plans to retain Utah's non-Queensland interests for itself. These include coal, copper and other mines in New Mexico, Kentucky, Canada, Brazil and elsewhere, the acquisition of which would confirm BHP as a major international resources

company in its own right.

The Utah purchase is part of a broad strategy to reduce BHP's dependence on steel. It is already a significant oil and gas producer and recently struck oil with its Jabiru No. 14 well in the Timor Sea, off Northern Australia.

Japanese steel mills approached by BHP have reportedly rejected its invitation to join the Queensland coal consortium. The export coal market is currently depressed.

To fund the formation of the proposed consortium, BHP has already organised a finance package for up to US\$1.125bn with a group of about 30 banks from Japan, the U.S., Europe and Canada.

Of the Utah deal, Sir James McNeill, the BHP chairman, has said: "The timing is seen by some as adding to our difficulties; but we are buying long term assets and taking an appropriately long term view of markets."

**Citicorp Australia lifts earnings**

BY OUR SYDNEY CORRESPONDENT

**CITICORP AUSTRALIA** has reported a net profit of A\$17.3m (US\$15.9m) for the nine months to September 30, an 8.1 per cent improvement on the same period last year. Pre-tax profit for the period was 12 per cent higher at A\$30.7m.

At the same time, Lloyds International, a wholly-owned subsidiary of Lloyds Bank of the UK, reported a 57 per cent improvement in net profit for the 12 months to September 30, to A\$7.2m and Associated Midland Group reported a doubling of net profit for the year to September 30 to A\$6.1m.

Citicorp Australia said earn-

ings continued to be retained within the country, to support future growth. Operating costs in the period were cut by 4.4 per cent, to A\$34.6m, following near completion of an automation programme that had been a heavy charge against profit in recent years.

At Lloyds International, Mr John Mitchell, the chief executive, said all divisions had contributed to the gain. The year had seen the establishment of a larger hill trading desk, and a full-scale foreign exchange hedge desk.

The Australian Banking Association (ABA), together

with the Life Insurance Federation, is unhappy with a suggestion by the Australian Associated Stock Exchanges (AASE) that banks, life offices, and pension funds be excluded from ownership of stockbroking firms.

The AASe told the Trade Practices Commission on Monday that it was prepared to change its membership rules by the 10th instant with 3.5 per cent. The intention is the merger to Maruzen, is believed to be that it could be delisted from the Tokyo Stock Exchange, unless it takes positive steps by next March to deal with its cumulative losses. These exceeded its net worth by Y99.4bn (S\$121m) at the end of March 1983.

Maruzen Oil is Japan's fourth largest refinery with a market share of 6 per cent and Daikyo is the 10th largest with 3.5 per cent. The intention is the merger to Maruzen, is believed to be that it could be delisted from the Tokyo Stock Exchange, unless it takes positive steps by next March to deal with its cumulative losses. These exceeded its net worth by Y99.4bn (S\$121m) at the end of March 1983.

Maruzen's losses have been caused by weak management and delayed tactics in coping with a reduction in oil demand. Its pre-tax losses were Y23.7bn in 1980-81 and expanded to Y99.4bn in 1981-82.

Reconstruction measures helped the company to report pre-tax profits of Y4.1bn in 1982-83, but its cumulative losses still exceed its net worth and if the company cannot solve its financial problems, it can be delisted for failing to pay a dividend for five consecutive years or for passing cumulative losses in excess of its net worth for three consecutive years.

Mr Sonosuke Uno, the Minister of International Trade and Industry, has welcomed the merger of the oil refining divisions of the two companies, since the agreement is expected to stimulate other oil refiners to follow suit.

**Downturn for OK Bazaars**

BY OUR JOHANNESBURG CORRESPONDENT

SOUTH AFRICA'S largest retail group, OK Bazaars, has been hit by changing purchasing patterns resulting from the country's economic downturn. In the six months to September 30, pre-tax profits fell to R12.1m (S10.8m), from R19.2m in the corresponding period of 1982.

First-half turnover rose to R810m from R731m. In the year to March 31 1983 a pre-tax profit of R49.4m was earned on turnover of R1.59bn.

The company said its difficulties arose from changes in purchasing patterns with lower sales of the more profitable durable goods. OK is locked in battle for market

share with its two main competitors, Pick n Pay and Checkers. South Africa's three main retail groups have been cutting margins on staples and non-durables and retail industry analysts believe that the price war will continue at least until the New Year.

OK has cut its interim dividend to 33 cents from 44 cents while first half earnings dropped to 54.6 cents a share from 84.3 cents. The year to March 31 1983 saw a total dividend of 142 cents and earnings of 230 cents a share. OK is 17.4 per cent owned by South African Breweries.

**BAT offshoot in India maintains strong growth**

BY P. C. MAHANTI IN CALCUTTA

ITC, the BAT subsidiary in India, has maintained strong growth during the 15-month period to June. The company has used a 15-month period to facilitate the change over to a new accounting year.

ITC had a record turnover of Rs 7.9bn (\$808m) and strong after-tax profits of Rs 244.7m. During the previous 12-month period turnover was Rs 1.8bn and net profits amounted to Rs 77.7m.

The company has declared a dividend of 22.5 per cent compared with 18 per cent previously. This is the highest dividend paid by the company in recent years.

ITC is now a well diversified company covering food and packaging, tobacco and tobacco products, and hotels

and it recently made a strong bid to take over a cement company. This has now fallen through but the company plans to expand its business operations in new directions in the near future.

Mr V. P. Singh, India's Commerce Minister, has described as "hypothetical" the question of whether or not the entire Indian textile industry is to be nationalised. It is known that the government has been studying such a proposal, reports K. K. Sharma from New Delhi.

In the wake of the nationalisation of 13 mills in Bombay recently, the government is presently examining a proposal to nationalise at least 17 more mills in the states of Gujarat and Pondicherry since these are no longer financially viable and have suspended production.

**Japanese oil groups in refining merger**

By Yoko Shibata in Tokyo

MARUZEN OIL and Daikyo Oil have agreed to merge their oil refinery divisions to form a new company by the end of March 1984, after separating their refining and sales divisions from the parent companies. The new company will become Japan's third largest oil refiner after Idemitsu Oil and Nippon Oil. The sales divisions of the companies are also expected to merge later.

Mr Yoshiro Nakayama, the president of Daikyo, and Mr Masahiko Shima, the president of Maruzen, said the tie-up could develop into a full merger in the future.

Mr Nakayama is likely to be president of the new company, which will be owned 46 per cent each by Daikyo and Maruzen, 5 per cent by the Industrial Bank of Japan, and 8 per cent by Sanwa Bank. A steering committee will soon be set up to discuss details of the merger.

The merger is expected to restore competitiveness for both companies by a considerable reduction in costs through the integration of oil procurement and refining facilities. However, the workforce of both companies will be maintained at current levels.

Maruzen Oil is Japan's fourth largest refinery with a market share of 6 per cent and Daikyo is the 10th largest with 3.5 per cent.

The intention is the merger to Maruzen, is believed to be that it could be delisted from the Tokyo Stock Exchange, unless it takes positive steps by next March to deal with its cumulative losses. These exceeded its net worth by Y99.4bn (S\$121m) at the end of March 1983.

Maruzen's losses have been caused by weak management and delayed tactics in coping with a reduction in oil demand. Its pre-tax losses were Y23.7bn in 1980-81 and expanded to Y99.4bn in 1981-82.

Reconstruction measures helped the company to report pre-tax profits of Y4.1bn in 1982-83, but its cumulative losses still exceed its net worth and if the company cannot solve its financial problems, it can be delisted for failing to pay a dividend for five consecutive years or for passing cumulative losses in excess of its net worth for three consecutive years.

Mr Sonosuke Uno, the Minister of International Trade and Industry, has welcomed the merger of the oil refining divisions of the two companies, since the agreement is expected to stimulate other oil refiners to follow suit.

OK has cut its interim dividend to 33 cents from 44 cents while first half earnings dropped to 54.6 cents a share from 84.3 cents. The year to March 31 1983 saw a total dividend of 142 cents and earnings of 230 cents a share. OK is 17.4 per cent owned by South African Breweries.

Reconstruction measures helped the company to report pre-tax profits of Y4.1bn in 1982-83, but its cumulative losses still exceed its net worth and if the company cannot solve its financial problems, it can be delisted for failing to pay a dividend for five consecutive years or for passing cumulative losses in excess of its net worth for three consecutive years.

Mr Sonosuke Uno, the Minister of International Trade and Industry, has welcomed the merger of the oil refining divisions of the two companies, since the agreement is expected to stimulate other oil refiners to follow suit.

OK has cut its interim dividend to 33 cents from 44 cents while first half earnings dropped to 54.6 cents a share from 84.3 cents. The year to March 31 1983 saw a total dividend of 142 cents and earnings of 230 cents a share. OK is 17.4 per cent owned by South African Breweries.

Reconstruction measures helped the company to report pre-tax profits of Y4.1bn in 1982-83, but its cumulative losses still exceed its net worth and if the company cannot solve its financial problems, it can be delisted for failing to pay a dividend for five consecutive years or for passing cumulative losses in excess of its net worth for three consecutive years.

Mr Sonosuke Uno, the Minister of International Trade and Industry, has welcomed the merger of the oil refining divisions of the two companies, since the agreement is expected to stimulate other oil refiners to follow suit.

OK has cut its interim dividend to 33 cents from 44 cents while first half earnings dropped to 54.6 cents a share from 84.3 cents. The year to March 31 1983 saw a total dividend of 142 cents and earnings of 230 cents a share. OK is 17.4 per cent owned by South African Breweries.

Reconstruction measures helped the company to report pre-tax profits of Y4.1bn in 1982-83, but its cumulative losses still exceed its net worth and if the company cannot solve its financial problems, it can be delisted for failing to pay a dividend for five consecutive years or for passing cumulative losses in excess of its net worth for three consecutive years.

Mr Sonosuke Uno, the Minister of International Trade and Industry, has welcomed the merger of the oil refining divisions of the two companies, since the agreement is expected to stimulate other oil refiners to follow suit.

OK has cut its interim dividend to 33 cents from 44 cents while first half earnings dropped to 54.6 cents a share from 84.3 cents. The year to March 31 1983 saw a total dividend of 142 cents and earnings of 230 cents a share. OK is 17.4 per cent owned by South African Breweries.

Reconstruction measures helped the company to report pre-tax profits of Y4.1bn in 1982-83, but its cumulative losses still exceed its net worth and if the company cannot solve its financial problems, it can be delisted for failing to pay a dividend for five consecutive years or for passing cumulative losses in excess of its net worth for three consecutive years.

Mr Sonosuke Uno, the Minister of International Trade and Industry, has welcomed the merger of the oil refining divisions of the two companies, since the agreement is expected to stimulate other oil refiners to follow suit.

OK has cut its interim dividend to 33 cents from 44 cents while first half earnings dropped to 54.6 cents a share from 84.3 cents. The year to March 31 1983 saw a total dividend of 142 cents and earnings of 230 cents a share. OK is 17.4 per cent owned by South African Breweries.

Reconstruction measures helped the company to report pre-tax profits of Y4.1bn in 1982-83, but its cumulative losses still exceed its net worth and if the company cannot solve its financial problems, it can be delisted for failing to pay a dividend for five consecutive years or for passing cumulative losses in excess of its net worth for three consecutive years.

Mr Sonosuke Uno, the Minister of International Trade and Industry, has welcomed the merger of the oil refining divisions of the two companies, since the agreement is expected to stimulate other oil refiners to follow suit.

OK has cut its interim dividend to 33 cents from 44 cents while first half earnings dropped to 54.6 cents a share from 84.3 cents. The year to March 31 1983 saw a total dividend of 142 cents and earnings of 230 cents a share. OK is 17.4 per cent owned by South African Breweries.

Reconstruction measures helped the company to report pre-tax profits of Y4.1bn in 1982-83, but its cumulative losses still exceed its net worth and if the company cannot solve its financial problems, it can be delisted for failing to pay a dividend for five consecutive years or for passing cumulative losses in excess of its net worth for three consecutive years.

Mr Sonosuke Uno, the Minister of International Trade and Industry, has welcomed the merger of the oil refining divisions of the two companies, since the agreement is expected to stimulate other oil refiners to follow suit.

OK has cut its interim dividend to 33 cents from 44 cents while first half earnings dropped to 54

## UK COMPANY NEWS

### Peachey slips but lifts total payout

**HIGHLIGHTS**

ALTHOUGH pre-tax profits of Peachey Property Corporation were slightly down for the year to June 30 1983, the property investment arm of the group is lifting its dividend by 0.75p to 60p net by an increased final of 3.75p.

Profits at mid-year showed a £30,000 advance to £3m but a £367,000 downturn in the second half, compared with the same period last year, saw the full-year taxable figure £36,000 lower at £6.69m.

Turnover was well down at £8.12m (£9.27m) but total revenue expanded from £5.28m to £5.94m before deductions of £1.35m (£1.23m) for administration expenses and £37,000 (£182,000) interest charges.

Profit on trading operations declined from £1.02m "abnormal" £2.55m to £2.25m.

The annual revaluation of properties, excluding developments, showed a surplus of £4.7m. Additions to the property portfolio during the year totalled £4.7m which, after allowing for disposals, resulted in a net increase of £13.9m.

The group's property assets, including developments in progress, exceeded £100m for the first time.

In a statement accompanying the full-year results the directors, headed by Sir Charles Ball, said that the company's confidence in the group has the capability to achieve still further growth.

In particular, they say it will continue its residential sites programme and the proceeds available, expand and improve its commercial property portfolio.

It is pointed out that net assets per 25p share, reflecting the sur-

plusional improvements and refurbishments over recent years and with considerable income and growth.

#### ● comment

Peachey Property has been one of the better performing shares in the property sector and news of a better than expected pre-tax profit of £6.69m helped send them back up 2p to 155p just 2p below the year's high. The 14 per cent increase in net dividend yields 5.5 per cent. Peachey continues to improve its assets, selling residential properties and improving its commercial portfolio. Carnaby Street, which is valued at around a fifth of its total portfolio looks set to make a substantial contribution in the next three to five years as the tacky 1960s image is upgraded for the 1980s. The £1.07m purchase of the Crown Estates chunk of the famous street looks a real bargain. The bulk of 184 units there will be let over the next two years allowing Peachey to achieve a new tenant mix in the shops while refurbished offices are getting rents from £8 to £12 per square foot.

revaluation, have risen again and at 260p represent a gain of 38 per cent over five years.

Attributable profits for the 1982-83 year emerged at £3.6m, compared with £3.95m after deducting tax of £3.05m (£3.14m) - last time extraordinary credits added £364,000.

Earnings came through 0.1p higher at 12.3p.

The directors say the most notable event of the year was the acquisition of the former part of the Carnaby estate last June. This estate adds to the group's existing holding on the other side of the road, where Peachey has successfully carried out sub-

stantial improvements and refurbishments over recent years and with considerable income and growth.

It is pointed out that net assets per 25p share, reflecting the sur-

### Earnings and dividend lift for Samuel Properties

**HIGHER EARNINGS** and dividends are announced by Samuel Properties for the year ended June 30 1983. And the directors are forecasting a satisfactory level of profitability to be maintained over the next few years.

Following a partial re-appraisal of its assets, selling residential properties and improving its commercial portfolio, Carnaby Street, which is valued at around a fifth of its total portfolio looks set to make a substantial contribution in the next three to five years as the tacky 1960s image is upgraded for the 1980s. The £1.07m purchase of the Crown Estates chunk of the famous street looks a real bargain. The bulk of 184 units there will be let over the next two years allowing Peachey to achieve a new tenant mix in the shops while refurbished offices are getting rents from £8 to £12 per square foot.

Earnings moved ahead by 2.2p to 10.8p while final dividend of 3.77p, net of the net total from 4.6p to 5.2p.

Profit expanded from £3.65m to £4.27m. After tax £1.1m (£1.15m), minorities £24,000 (£21,000), and extraordinary credits £222,000 (£22,000), the net balance came out at £3.36m (£3.22m). The dividend cost is 11.25p to 11.52p, net of tax.

The directors' forecast for the next few years takes account of the substantial development programme planned and the rental income growth from existing properties.

#### Laidlaw forecast

The Laidlaw Group, which consists of six Ford main dealerships, is coming to the Unlisted Securities Market in a placing by merchant bankers Nobile Grossart of 2m shares at 45p each. That values the whole company at £3.4m. The placing document makes a profit forecast of £1.05m of £800,000, plus the shares on offer at a gross taxed multiple of 7.6. The gross dividend yield at the placing price is 1.84 per cent. Dealings are expected to begin on October 31.

Of the 2m shares placed, half are new shares issued to raise £200,000 net of expenses, and the rest are being sold by existing shareholders.

The proceeds of the placing will initially be used to reduce bank borrowings of about £3m.

This advertisement appears as a matter of record only.

### Francis Inds. confident of further improvement

**INTERIM TAXABLE** profits of Francis Industries rose from a restated £165,415 to £492,110, and the directors are confident that the improvement in performance will continue.

Their confidence stems from moves, currently being undertaken, aimed at concentration of resources and greater profitability.

The moves arise from the end of last year when the directors decided to commence a major re-appraisal of the company's longer term strategy following changes in each of the industries in which it operates.

Following a partial re-appraisal of its assets, selling residential properties and improving its commercial portfolio, Carnaby Street, which is valued at around a fifth of its total portfolio looks set to make a substantial contribution in the next three to five years as the tacky 1960s image is upgraded for the 1980s. The £1.07m purchase of the Crown Estates chunk of the famous street looks a real bargain. The bulk of 184 units there will be let over the next two years allowing Peachey to achieve a new tenant mix in the shops while refurbished offices are getting rents from £8 to £12 per square foot.

Earnings moved ahead by 2.2p to 10.8p while final dividend of 3.77p, net of the net total from 4.6p to 5.2p.

Profit expanded from £3.65m to £4.27m. After tax £1.1m (£1.15m), minorities £24,000 (£21,000), and extraordinary credits £222,000 (£22,000), the net balance came out at £3.36m (£3.22m). The dividend cost is 11.25p to 11.52p, net of tax.

The directors' forecast for the next few years takes account of the substantial development programme planned and the rental income growth from existing properties.

At last Francis Industries' spending on new packaging plant looks

as if it is producing real reductions in operating costs. Margins have widened radically to 25 per cent and nearly tripled pre-tax profits on a mere 10 per cent increase in turnover should do something to deter any further bids for the company.

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

international interests, only underline the limitations to which Francis' success is likely to be limited.

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

international interests, only underline the limitations to which Francis' success is likely to be limited.

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

international interests, only underline the limitations to which Francis' success is likely to be limited.

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

international interests, only underline the limitations to which Francis' success is likely to be limited.

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

THE confidence expressed in the chairman's annual report was not matched by the interim figures of Kwik-Fit (Tyres and Exhausts) Holdings. Pre-tax profits improved from £1.57m to £2.41m in the six months to August 31, 1983.

The interim dividend is effectively increased from an indicated 0.8p per cent to 1.075p per cent. Last year a total of £4.32p was paid from pre-tax profits of £2.57m (£1.56m).

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

The directors say that the recent move of its head office to London will improve the effectiveness of group management, particularly in relation to its

Confidence  
Movement

## UK COMPANY NEWS

## Downward trend continues at Runciman

WHILE pre-tax profits for the first half of 1983 at Walter Runciman have slumped from £1.03m to £477,000, the directors say that this is a material recovery from £44,000 achieved in the previous second half.

Turnover in the first half expanded from £26.69m to £27.77m.

The directors expect group pre-tax profits for the second half of 1983 to be similar to those of the first. In the last full year pre-tax profits of this shipping, freight agency, insurance and security group amounted to £1.07m (£2.32m).

The net interim dividend has been held at 2.5p. In the last full year a final of 2.5p was also paid.

At the end of the last full year the directors said that pre-tax profits for 1983 could be expected to show a significant improvement in results for 1984.

The directors now say that the shipping market continues to be seriously depressed and that domestic demand for physical security products remains low.

Within the shipping division Captain George Gibson and Liquid Gas Equipment were all profitable, but Anchor Line's eastern service operated at a loss.

The security division recovered sufficiently from last year's losses to reach break-even.

## DIVIDENDS ANNOUNCED

	Date	Current payment	Coupons of pending	Total for last year	Total
English Natl. Prefd. int.	4.4			4.4	£2.3m
English Natl. Defd. int.	1.95			1.95	£2.2m
Francis Inds.	1			1	£2.3m
Japan Assets Trust	0.05			0.05	£2.3m
Kwik-Fit	0.78			0.78	£2.3m
New Austral.	1.5			1.5	£2.3m
Peachey Prop.	8.75			8.75	£2.3m
Walter Runciman	...int. 2.5			2.5	£2.3m
Special Div.	3.77			3.77	£2.3m
Dividends shown per share not except where otherwise stated.					
* Equivalent after allowing for scrip issue. * On capital increased by rights and/or acquisition issues. † USM stock \$ For 14 months: special non-recurring dividend.					

## Gallaher advances by 51% in third quarter

WITH a third quarter increase of 50.7% in pre-tax profits at Gallaher, results for the nine months to the end of September 1983 rose sharply from £54.9m to £83m. Both the tobacco and non-tobacco sectors performed well, says Mr S. G. Cameron, chairman, and trading results cumulatively ahead by 34 per cent and 49 per cent respectively.

Pre-tax profits for the third quarter increased from £21.3m to £32.1m.

Turnover, excluding VAT, of this group, which is a subsidiary of American Brands, moved up from £1.06m to £1.91m for the nine months.

In the UK, tobacco results continued to benefit from market share gains. Export progress was maintained, with sales up 32 per cent this year. Results of overseas subsidiaries were slightly down, mainly because of the instability of the West German market.

Third quarter results from optics were "impressive," says Cameron. This reflected a good contribution from the UK and Spain, with Italy showing some signs of recovery.

Results in pumps and valves

were still being affected by weak UK demand and continuing difficulties in exporting to Nigeria. Nevertheless, cumulative figures were slightly ahead of last year, helped by generally satisfactory results from overseas companies.

Despite intense competition in distribution, Mr Cameron says that trading has been satisfactory. Although trading profits for the nine months were ahead, there was a reduction in the third quarter because last year's results included exceptional benefits from the effect of price increases on each.

The performance of the main companies in office products progressed well. Results, after nine months, matched last year's despite major reorganisation costs. Eastlight, acquired earlier this year, has made a good contribution.

For the third quarter profit of £38.7m from the London free market price of just under \$400 per ounce.

Professor Roger Gidlow, associate economics professor at the University of the Witwatersrand, said that he expects industrial consumption to rise by 10 per cent this year and more in 1984, cancelling out the surplus in supply over demand for the first time since 1978.

Supplies to South Africa

and the Soviet Union, which account for more than four-fifths of the world's platinum,

are unlikely to grow much over the next few years, Professor Gidlow said.

Louise's group's products are in demand and the overall trading circumstances remain encouraging. Accordingly the directors are hopeful that further advances will be made and that these will be reflected in results for the full year.

Leading Leisure

Leading Leisure, a Southampton-based entertainment and leisure group, is raising £1.2m through a over-the-counter placement of 4,800 shares at 25p each.

Previously, 49 per cent of that company's equity had been held

by the group and it had been

## Humber Stores

Mr A. J. Richmond and Mr R. A. Barker of Peat, Marwick and Mitchell have been appointed receivers of Humber Stores Contractors, Hull, hardware merchants.

However, the company is continuing to trade in the short term.

## Times Veneer in profit

IN THE first half of 1983 timber veneer and processed wood products maker and merchant "The Times" Veneer Company returned to profits with a pre-tax surplus of £31,591, compared with a loss of £61,894. In 1982 the company made a taxable loss of £161,023.

But despite earnings per 5p share down from 4.65p (now 0.50p) there is again no interim dividend—the last payout was a final in respect of 1978.

Sales in the opening half came to £2.41m (£2.16m). There was again no tax charge—last time extraordinary debits came to £19,019.

The directors of this close company point out that Swan-draff selected a wholly-owned subsidiary during the period.

Previously, 49 per cent of that company's equity had been held

by the group and it had been

treated as an associate for accounting purposes. The relevant share of its results has been incorporated in accordance with the equity interest held in each period.

Looking to the second half they say the group's products are in demand and the overall trading circumstances remain encouraging. Accordingly the directors are hopeful that further advances will be made and that these will be reflected in results for the full year.

See Lex

## MINING NEWS

## Poor third quarter for Asarco

BY KENNETH MARSTON, MINING EDITOR

ANOTHER disappointing third quarter result is announced by a North American natural resource major, Asarco, the big U.S. smelter and refiner of non-ferrous metals. There was a fall in net earnings to \$2.85m (£1.9m), from \$2.6m in the previous three months.

Both prices are considerably lower at the moment.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

Average prices of silver and copper, the company's major products, were lower in the past quarter.

Silver averaged \$12.03 per ounce compared with \$12.14 in

the second quarter while the U.S. domestic price of copper averaged only 77.7 cents per pound compared with 81 cents per pound the previous three months.

Both prices are considerably lower at the moment.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were announced in July the company pointed out that the third quarter of the year was usually a slow one owing to seasonal factors.

It warned that because basic metal prices had lagged some in the previous three months.

When the third quarter results were

This advertisement is issued in compliance with the requirements of the Council of The Stock Exchange. It does not constitute an invitation to any person to subscribe for or purchase any shares.

## GAMERICA Inc.

(A company incorporated with limited liability in the Republic of Panama under Law 32 of February 26, 1927, on Companies)

### SHARE CAPITAL

Authorised 1,000,000 Voting redeemable Shares 95,016.29 Issued on 21st October, 1983 of common stock with no par value

Application has been made to the Council of The Stock Exchange for admission to the Official List of all the varying redeemable Shares of common stock with no par value of the Company issued and available to be issued. Particulars of the Company are available in the Exetel Statistical Service and copies of such particulars may be obtained during business hours on any weekday (Public Holidays excepted) up to and including 11th November, 1983.

Global Asset Management Limited  
66 St James's Street London SW1A 1NE

Kitcat & Aitken  
The Stock Exchange London EC2N 1HB  
26th October, 1983.

This Advertisement is issued in accordance with the terms of the Notes (as hereinbefore defined)

**NOTICE TO THE HOLDERS OF TOTAL OIL MARINE p.l.c. (the "Company")**

**9½ GUARANTEED FRENCH FRANC NOTES DUE MARCH 15, 1987 (the "Notes")**

On Wednesday 19th October 1983 Compagnie Française des Petroles (the "Guarantor") acquired 100% of the issued ordinary share capital of Total Oil Holdings Limited ("Holdings") in exchange for the whole of the issued ordinary share capital of the Company and Total Oil Great Britain Limited.

Holdings is a company incorporated in England with limited liability and having an authorised and issued share capital of £25,500,000.

**THE FOLLOWING APPOINTMENTS HAVE BEEN MADE TO THE BOARD OF HOLDINGS:**

P. L. BURGIN — CHAIRMAN  
A. J. BRION — DIRECTOR  
A. PARQUET — DIRECTOR  
D. RENOUARD — DIRECTOR

The Guarantor's obligations under the Notes remain unchanged.

October 1983

For a personal appointment to view, ring any time, day or night.

## THE LAST RIVERSIDE 5-BEDROOM HOUSE.

Four double bedrooms, one single, two bathrooms, fully-fitted kitchen, cloakroom, reception room, dining room, sun terrace on all three floors. Spectacular river views. Fitted carpets and curtains. Private entrance with 24-hour portage, underground parking, private riverside gardens. Interior design and office services available.

£395,000. 99-year Crown Lease.

Wates 01-8219387 Hampton & Sons 01-493 8222

**AMERICAN EXECUTIVES**  
seek luxury furnished flats or houses up to £400 per week  
Usual fees required  
Phillips Kay & Lewis  
01-838 2245  
Telex: 27346 RESIDE G

**CITY OF LONDON**  
FLATS FOR SALE AND TO LET IN VARIOUS BLOCKS  
For full information contact  
Frank Harris and Co. 240 2430

### MOTOR CARS

**NEW CARS TOP DISCOUNTS**  
Without importing. Immediate delivery all makes and models.  
Leasing - HP at low rates  
INTERFLEET LTD.  
Tel: 01-902 4922  
(Open Sat 10 am - 1 pm)

**BMW 80-82** All models wanted for cash.  
0802 72444.

**MALTIN WANT PORSCHE** All Models.  
0491 576111.

**SKY DAVOS** Non-standard dates possible.  
Hotels from £239—appts. £175.  
Xmas spaces. Tailor-Made. 0223 889958.

### OVERSEAS PROPERTY

**YOU MUST VISIT**  
THE INTERNATIONAL PROPERTY & TIME SHARING EXHIBITION

It opens the door to your dream holiday home or investment, both in the UK and worldwide. You will see in glorious detail flats, villas, chalets, condominiums to suit all pockets and tastes. Meet the leading international buying and selling experts at

The Cumberland Hotel, Marble Arch, London W1.

Thursday 27 October 11am-9pm

Friday 28 October 11am-8pm

Saturday 29 October 10am-5pm

Admission £1

Organisers: Homes & Travel Abroad Magazine &  
Holiday Time-Sharing Magazine

**SWITZERLAND LAKE GENEAU—MOUNTAIN RESORTS**  
YOU can buy apartments in MONTREUX on LAKE GENEAU. Also available in famous mountain resorts: VILLARS, VERBIER, LES DIABLETS, LEYSIN, CHATEAU D'YDÉE. Individual and group opportunities for foreigners.  
Prices from Sfr 200,000 - Liberal mortgages at 9½% interest.  
Developer: c/o Globe Plan SA, Mon-Repos 24, 1005 Lausanne, Switzerland  
Tel: (21) 22 35 12 - Telex: 25185 MELES CH

### ART GALLERIES

AGNEW GALLERY, 43, Old Bond St., W1.  
01-582 5176 DAVID ORWELL and  
CHRISTIAN ROSENTHAL, 10, Old Bond St., W1.  
01-582 5176 Australian artists. Until 11 Nov. Mon.-  
Fri. 9.30-5.30. Thurs. until 7.

ARTISTS' GALLERY, Old Bond St., W1.  
01-582 5176 DAVID WYNNE-GOLDBURG,  
etc. Until 19 Nov. Mon-Fri. 9.30-5.30;

BRUNELLE & DABY, 12, Old Bond St., W1.  
01-582 5984 PAUL MAZE (1987).

### RESIDENTIAL PROPERTY

#### HOLIDAYS & TRAVEL

#### MOTOR CARS

#### all appear on

#### SATURDAYS

#### and WEDNESDAYS

#### To advertise phone

01-248 8000

Diane Brundish  
(ext. 4186)

OR

Diane Steward  
(ext. 3252)

## Royal Worcester defence under fire from Crystaleate

BY RAY MAUGHAN

Crystaleate Holdings, the electronics group bidding £20m for Royal Worcester, has returned to the attack on its target's record, and specifically its defence document in the scant few days before the offer for the china, industrial ceramics and electro-tastics group reaches its first closing date on Friday October 28.

Writing to Royal Worcester shareholders, Mr John Leworthy, the Crystaleate chairman, says forcefully that the "defence rests heavily on questioning the benefits of the merger with Welwyn Electronics. Indeed, were there more similarity between the two companies' electronics activities, there would be less sense in merging. We repeat our opinion that the combined technologies of Crystaleate and Welwyn Electronics and their design, manufacturing, test and marketing facilities will complement each other and will produce a major

I am sure, be tolerated by the force in the components and assembly sector of the electronics industry."

"Your board's inability to see the industrial sense of this merger is indicative of their attitude over the last few years."

Mr Leworthy acknowledges that "its activities are not the same as those of Welwyn Electronics. Indeed, were there more

similarity between the two companies' electronics activities, there would be less sense in merging. We repeat our opinion that the combined technologies of Crystaleate and Welwyn Electronics and their design, manufacturing, test and marketing facilities will complement each other and will produce a major

force in the components and assembly sector of the electronics industry."

There is no response from Crystaleate to some of the key elements of the defence documents, namely an attack on the volume of stock, on loan stock conversion which Crystaleate proposes to issue, the lack of a cash alternative and the future of the china activities which the bidder has indicated may be sold or floated off.

Nevertheless, Crystaleate has set out the reasons why "Royal Worcester's rejection of Crystaleate's offer is unusual and should be ignored by shareholders."

## BIDS AND DEALS

## Hogg Robinson in takeover talks with Wakefield Fortune

BY DAVID DODWELL

Hogg Robinson Travel, a subsidiary of the Hogg Robinson Insurance group, is at an advanced stage of discussions with Holland America Line on the possible purchase of HAL's wholly-owned UK travel agency group, Wakefield Fortune International.

If the deal were to be successfully completed, it would make Hogg Robinson Travel one of the UK's three largest travel agency businesses, with a combined turnover of about £250m.

If the deal were to be successfully completed, it would make Hogg Robinson Travel one of the UK's three largest travel agency businesses, with a combined turnover of about £250m.

Earlier this month HAL announced the sale of two 750-passenger luxury cruise ships to the Tung Group of Hong Kong, talks closing at 120p.

Holland America Line, a privately-owned company with offices in the Netherlands and in Stamford, Connecticut, is understood to have been seeking a buyer for Wakefield Fortune since June—it took 100 per cent control of the company in 1976.

Neither Wakefield Travel nor

Hogg Robinson Travel were prepared yesterday to comment on the likelihood of any deal being successfully concluded.

It was nevertheless disclosed

that talks had been in progress for about 10 weeks, and that

barring fresh obstacles, a settlement could be reached within the week.

At present, Wakefield Fortune and Hogg Robinson are third place in the internally-calculated rankings of UK travel agent. With just under 100 outlets apiece, they lie behind Thomas Cook and Pickfords, which both have more than 300 outlets.

For their turnover — Wakefield reported about £100m in 1982, with Hogg Robinson reporting about £100m — puts them closer to the top market leaders.

Wakefield Fortune is thought to have been only marginally profitable over the past 18 months, but this is in part due to a programme of heavy investment in new technology, and to the acquisition in January this year of Blue Star Travel, a subsidiary of the Blue Star line — thought to be about £2.5m.

### Fairey Exhibitions

Agreement has been reached for the purchase of certain assets of Fairey Exhibitions by the company's senior management. The assets have been bought for around £25.5m.

Exhibitions is based at Hamble and is a subsidiary of Fairey Marine, which is a member of the Fairey Holdings Group whose parent company is S Pearson & Son.

The business will be carried on under the name Intex. Mr Dave Flower will be chairman and managing director, Mr Brian Jacobs, production director, and Mr Dennis Mason, financial director. Mr Flower and Mr Jacobs were respectively director and general manager and production manager of Exhibitions. Mr Mason has come from Fairey Marine.

Intex will retain the previous staff and workforce.

### Bluemel Bros.

Bluemel Bros. says Hammond International Inc. has sold 332,000 of its ordinary shares and 99,000 new ordinary (14.64 per cent of each class) to

Balkiley Investment.

This argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The OFT stated that this bid would be considered afresh and that a decision from Mr Norman Tebbit, Secretary of State for Trade and Industry could be expected before the first closing date of the offer on November 12, 1983.

This bid will present Mr Tebbit with his first major decision on bids since his recent appointment.

It will also be the first

test on the new guidelines on competition outlined last week by Mr Alex Fletcher, minister responsible for corporate and consumer affairs at the Department of Trade and Industry.

This argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

The argument is expected to give prominence to OFT officials, who will meet on November 12 this week.

## UK COMPANY NEWS

### Wace not up to target—planning rationalisation

**FIRST-HALF 1983** results of the Wace Group show a continuing improvement but they are not as good as the directors anticipated. Operating profit rose from £10,000 to £62,000 and the group's loss was cut from £312,000 to £285,000.

The loss incurred by Friarsgate Studios exceeded the profit made by the rest of the group. This cannot be allowed to continue" and the directors have plans for the disposal of the business and premises. Redundancy costs and losses on the sale could be as high as £150,000.

"The outline budget of the rationalised organisation shows

a healthy profit for 1984, and every effort is being made to achieve these long-awaited results," the directors tell members.

Turnover of the group, which serves the needs of the advertising, printing and graphic arts industries, fell from £2.76m to £2.59m in the half year. The loss was struck after interest paid of £81,000 (£96,000) and exceptional charges of £68,000 (£223,000).

Profitability of all units increased in the first half of the second half of 1982, with the exception of Composite Graphics and Friarsgate. Expenses have

been reduced in Composite, turnover is recovering and the company has started to trade profitably.

In July trading was poor, but the following two months have exceeded budget with the exception of Friarsgate. For the second half the directors expect that the operating profit will be sufficient to cover interest payable, and the loss will represent the exceptional expenditure.

For the full year 1982 the group incurred a loss of £308,000 (£364,000), including exceptional expenditure. No dividend has been paid since the final of 0.75p in June 1981.

### Another 117 companies wound up

Compulsory winding up orders against 117 companies have been made by Mr Justice Nourse in the High Court.

They were: Vose, Premier Word Processing Agencies, Waldquelle (UK), T. Sweeney & Co.

Ambrogade, F. C. Smith (Bermondsey), V. P. Homes, Barfield, Heathrow Merchantile, Dustmeal, K. C. L. East West (Smithfield), Little Rock Computing Techniques (International), Computing Techniques (Glenrothes), Blackley Auto Electrics.

H. & H. Haulage, Ashton Gas Services (Slough), Hopmere Builders, Moststar, Cavendish Transport & Trading.

Sales Cassette Centre, Image Exhibition Services.

Boblence Securities, R. C. Seal & Co., Boundhurst, Lincene Restaurant (Bournemouth), Flashbamer, Project Sales and Marketing, Circuit Productions.

Voucherlink, Costa Blanca Investments, T. M. C. (Realisations), Alpine Grove, Red-Jones, Private Spy, Decision Base Learning Systems.

Radwall Orton, AEC Electric Hand Dryer Servicing Company, Kepbourn, I. Richman (Luton), Mervyn Mark (Builders).

Frank Wright Shoes 806 Cars, Vlipy, Pledgwarens, Ada Carter, Avon Fashion, Senaria Lee.

R. G. Twynan, Edgar Davies (Surgical), Rightshoe, Gold Star Window Cleaning Contractors, Millbank Cleaning Co, Philson Tailorcraft, Graham Burrows.

Jencrose, Woodrow Wilson & Co., Exarn, Royca Phones Manufacturing Co, Waste Lubricating Oils, Arrowplate.

The Colchester Restaurant and Bar Co., ICC Engineering, Modern Filtration, Complete Audio Systems, Intervideo.

Motorcycle, CMC Consolidated Mercantile International, Len-tronics (Laptops), Butter Technology (Southam), Hologram Recording, Extra Vehicle Repair Centre, Showsigns.

Cravendale, Thermofax, Nidward, Metal Trophy Boading, Ternfright International, Anglo International Technical Services, Hurstvale Haulage, Elizabeth Keyes, Calvin Antiques, John Ekin (Trussed Rafters), Eco Jewellery, Blundell Engineering, Cube Industries, Elmcrest Hotel, L. Tilney, The Most Gear Company, S. Bryan, Parts Suppliers, J. C. & W. Smith (Fuel Recovery), Vetralla (UK).

A compulsory winding up order made on October 10 against Lala Trading Co was rescinded and the petition dismissed by consent.

Newman Transport Services, Locana Leasing, S. B. W. (Fancy Goods), E. Bierbon and Son, Etros, Engineering, Angela Hartford, Kenmar.

Stone Facings (Rochdale), Hillside, Hidden Exporters, Mura Electronics UK, Sweetday.

Warrensege, Trafal House, Queenay, Raymar Builders, Beacon Import-Export, Dupac House.

R. G. Twynan, Edgar Davies (Surgical), Rightshoe, Gold Star Window Cleaning Contractors, Millbank Cleaning Co, Philson Tailorcraft, Graham Burrows.

Jencrose, Woodrow Wilson & Co., Exarn, Royca Phones Manufacturing Co, Waste Lubricating Oils, Arrowplate.

The Colchester Restaurant and Bar Co., ICC Engineering, Modern Filtration, Complete Audio Systems, Intervideo.

Motorcycle, CMC Consolidated Mercantile International, Len-tronics (Laptops), Butter Technology (Southam), Hologram Recording, Extra Vehicle Repair Centre, Showsigns.

Cravendale, Thermofax, Nidward, Metal Trophy Boading, Ternfright International, Anglo International Technical Services, Hurstvale Haulage, Elizabeth Keyes, Calvin Antiques, John Ekin (Trussed Rafters), Eco Jewellery, Blundell Engineering, Cube Industries, Elmcrest Hotel, L. Tilney, The Most Gear Company, S. Bryan, Parts Suppliers, J. C. & W. Smith (Fuel Recovery), Vetralla (UK).

A compulsory winding up order made on October 10 against Lala Trading Co was rescinded and the petition dismissed by consent.

**Border & Southern**

At September 30, 1983 net asset value per 10p share of the Border & Southern Stockholders Fund totalled 165.5p, against 115.5p, the prior charge, and 167.5p, the market value with 117.6p, after prior charges at market value.

Earnings for the year to end-September declined from 3.5p to 3.25p per share. A final dividend of 1.85p (1.7p) lifts the net total to 3.15p (3p).

Available profits amounted to £3.25m (£3.47m) after tax of £1.66m (£2.13m).

**Japan Assets Trust**

A dividend of 0.05p net has been declared by Japan Assets Trust for the year to September 30 1983. A payment of 0.1p was made in the previous 14 months.

Net asset value per 10p share improved from 30.27p to 45.14p and earnings per share were 0.1p against 0.15p.

Unbanked investment income for the year ended September 30, 1983, from £134,000 to £166,000, but deposit incomes fell from £83,000 to £18,000. Expenses accounted for £187,000 against £120,000 and the tax charge was halved at £16,000.

**English National**

At September 30, net asset values relating to shareholders of English National Investment Company have shown growth.

Preferred ordinary holders' total value per share has risen to 196.3p from the 170.3p of 12 months earlier, and for deferred ordinary it is up to 131.3p, against 98.8p.

For the half year ended September 30, 1983 net income rose from £75,000 to £82,000, or £23,000 (55,000).

Gross income came to £156,000 (£144,000).

Earnings for the preferred were 5.52p (4.89p) and for the deferred 2.87p (2.51p). The interim dividend on the preferred is lifted to 4.4p (4.25p) while deferred holders receive 1.89p (1.8p).

**BOARD MEETINGS**

The following companies have notified dates of board meetings to the Stock Exchange. Such meetings are usually held during the month of November. Official indications are not available as to whether the dividends are interim or final and the subscription offer documents are based on last year's financials.

TODAY

Interiors, Advanced Sciences, Arun, Bossey and Hedges, Border Breweries (Wrexham), Foster Brothers Clothing, Gilf and Butts, Henderson Group, TR Natural Resources, Investment Trust, Whitehead, London, Proctor and Gamble, Fisher, Acme Jewellers, British Assets Trust, David Dixon, Rowland Gurn, Mansfield Finance Trust, TR Australia, Investment Trust.

**UPCOMING DATES**

Interiors, Advanced Sciences, Arun, Bossey and Hedges, Border Breweries (Wrexham), Foster Brothers Clothing, Gilf and Butts, Henderson Group, TR Natural Resources, Investment Trust, Whitehead, London, Proctor and Gamble, Fisher, Acme Jewellers, British Assets Trust, David Dixon, Rowland Gurn, Mansfield Finance Trust, TR Australia, Investment Trust.

**Export shipments**

Associated Next Services, Nov. 14

Audio Fidelity Nov. 17

Harworth (J.) Nov. 2

Herman Smith Nov. 2

Freewright Parker Nov. 5

### Humber Fertilisers achieves 110% rise in full year profits

**Humber Fertilisers**, Britain's largest manufacturer of organic based fertilisers, achieved a 110 per cent increase in full year pre-tax profits from £68,986 to £144,995.

Sales for the 12 months to June 30 1983 improved from £2.67m to £3.6m and operating profit was up 100 per cent to £174,942 against £81,248. The pre-tax result was struck after interest of £59,847 compared with £61,353.

They state that the programme of improvements has continued into the current year, and approximately £100,000 has been spent reorganising and centralising the bagging unit.

The company now has a net worth of more than £6 million supported by four area sales managers covering the whole of the UK.

This improved coverage and co-ordination, together with the product improvements undertaken, has been reflected in increased sales achieved to date, they say.

They add that they have concentrated on the optimisation of the manufacturing process, particularly with the introduction of microprocessor based mixing plant. This has improved the efficiency and accuracy of the mixing process, they say.

### Lister sees improvement

**REORGANISATION** of production facilities and rationalisation of the product range of textiles manufacturer Lister & Company in recent years are enabling the group to take advantage of increased demand through increased productivity, Mr John Segal, chairman, told shareholders in his annual statement.

This year the directors' confidence in the future, and accounts for the return to profits — as reported on October 5 — in the second half of the year to March 26 1983, he explains.

The second half profits of £47,000 (£91,000) reduced the loss for the year to £272,000 (loss of £100,000). With the loss

per 25p share given as 2.28p (earnings 0.56p) the year's dividend was held at 0.1p nat.

At the year end shareholders' funds had risen from £12.37m to £20.91m following a surplus on the revaluation of properties of £9.25m, and there was loan capital outstanding of £7.2m (£1.3m).

Fixed assets were valued at £27.56m (£17.7m) and net current assets came to £312,000 (liabilities £3.4m) including overdrafts of £8.26m (£12.62m). During the year there was an increase in net working capital of £111,661 compared with £275,181.

enable it to maintain higher machine loadings throughout the year.

As known, pre-tax profits were down from £1.47m to £1.37m in the year to June 30, 1983. The balance sheet shows shareholders' funds up from £6.26m to £6.81m. Net current assets were £3.43m against £2.96m.

There was an increase in net liquid funds of £120,177 (£436,378 decrease). Meeting Leicester, November 14, noon.

**Ferry Pickering starts confidently**

A satisfactory first quarter is reported by Mr P. G. Nixon, chairman of Ferry Pickering Green, the printing, packaging and publishing concern.

In his annual report, Mr Nixon says the current financial year has opened with the same seasonal pattern as last, with a satisfactory first quarter and a second which "looks to be very good indeed."

It is the group's intention now to develop new markets to

**PRITCHARD SERVICES GROUP PLC**  
one of the world's largest cleaning, maintenance and security companies with a staff of 70,000 operating from 450 branches in over 20 countries

has acquired



the largest, privately-owned food service management company in New York, New Jersey and Connecticut with revenues of over \$30 million.

The undersigned initiated this transaction and assisted with the negotiations.

Trabel Associates Limited,  
23, Heron Place,  
9, Thayer Street,  
LONDON W1M 5LF  
01-486-6401

British American Consultants Inc.,  
Suite 403,  
1665 Palm Beach Lakes Boulevard,  
West Palm Beach, Florida 33401  
305-689-8998

25th October 1983

This advertisement is issued in compliance with the requirements of the Council of The Stock Exchange

**FLOGAS plc**

(Incorporated in the Republic of Ireland under the Companies Act 1963)

No. 60035

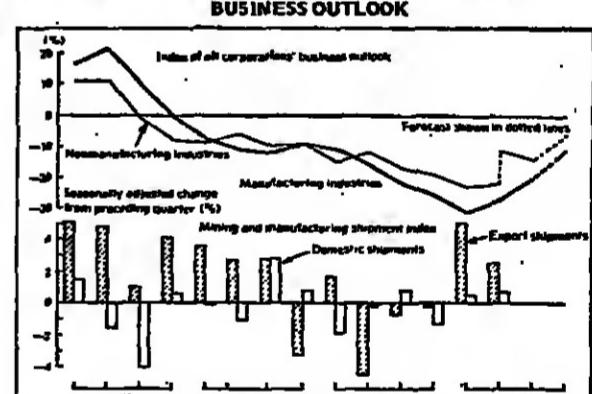
SHARE CAPITAL

Authorised  
IRE 3,000,000 In 30,000,000 ordinary shares of IRE10p each 1,621,675.30  
In connection with a placing by Simon & Coates and Development Capital Corporation Limited, Dublin, of 4,900,292 Ordinary shares of IRE10p each at IRE7.7p (equivalent to 61.5p sterling) per share, application has been made to the Council of The Stock Exchange for the grant of permission for the whole of the issued share capital of Flogas plc to be dealt in on the Unlisted Securities Market. A proportion of the shares being placed are available to the public through the market. It is emphasised that no application has been made for these securities to be admitted to official listing. Particulars relating to the company are available in the Extel Statistical Services and copies of the Prospectus may be obtained during normal business hours on any weekday (Bank Holidays and Saturdays excepted) up to and including 14th November 1983 from:

Simon & Coates  
1 London Wall Buildings, London EC2M 5PT  
Development Capital Corporation Limited  
DCC House, Stillorgan, Blackrock, Co. Dublin

J. & E. Davy  
63 Dawson Street, Dublin 2

### IMPROVED CORPORATE ASSESSMENT OF BUSINESS OUTLOOK



(Source) Bank of Japan, "Short-term Economic Survey of Principal Corporations"; MATI = As the number of manufacturing corporations covered in the survey was increased in August, the figures for August and September each year, the shipment index shows the quarterly average.

ratio and the rate in its production since this spring; non-ferrous metals and textiles have successfully lowered their inventory-sales ratio, although an increase in production is not yet evident.

Business management's expectation of recovery stems from the improved outlook of the microeconomy. This accounts for the fact that corporate business outlook is not based entirely on macroeconomic factors — typically, the real economic growth rate.

Considering that the total economic pie has become bigger and the service sector has become active — although figures on its activities are not available in conventional statistics — there is ample possibility that corporate assessment of business prospects will continue to grow for the time being.

The three-year recession has finally ended. Macroeconomic indicators have gained brightness. The tempo of economic recovery in the United States is surprisingly fast.

It should be noted, however, that Japan's takeoff from the recession depends largely on the recovery of its exports, and that the U.S. economy is still fettered by high real interest rates, which deter a full-scale recovery based on plant and equipment investment.

On the other hand, factors that could aggravate trade friction, such as Japan's snowballing current account surplus, have become increasingly salient.

# THE ARTS

## The Relapse/Lyric, Hammersmith

Michael Coveney

Simon Callow, the outstanding bravura actor of his generation, has a successful knack of appropriating lust comic roles seemingly rendered impregnable by his seniors. He matched and then trumped memories of Leonard Rossiter's Arturo Ui some years ago; and now, in the perfect setting of the Lyric, Hammersmith, he challenges comparison with Donald Sinden's 1967 Lord Fopington.

In a way, much of Callow's career has been marking time for this part, and he took a dry run at it in the role of Lord Acre in Bond's Restoration (1981) at the Royal Court. Whereas Sinden struck lightning on the pay-off tags ("Stamp me vital," "Strike me dumb"), Callow threads his imperious way through the gilded vowels, as written, and holds them up for our delighted inspection from the minute we learn he's bought a title for "ten thousand pawns".

He caresses the language with relish, taking a squeaky cue from his tiny page and unthrottling a full diapason within the space of a short paragraph. He holds on to his vocal reserves until the very last, squinting and mincing his way through the assault on Sir Tumtelly Clumsey's daughter like an absurd prize-poodle—part toy, part animal—that is wound up in the wings before each entrance.

Foppington must painstakingly start all over again each time he appears and Callow finds something freshly physical on each instant. His levée is judiciously handled, his pass at Amanda bravely delivered. Arrested as an impostor in the country he is bound from head to toe and still manages to skip



Simon Callow

painfully downstage to his impoverished brother (Christopher Fulford) before jumping quizzically off to the dog kennels. From there he returns to assert his identity with his huge biceps obliterating his right cheek like a disbelieved hay-stack.

As it should be, this is the star turn of William Gaskill's refreshing revival which has the great merit of retaining our interest in the complicated double plot. The passages with the chaplain and the nurse far once make sense. And the American suspicion of Loveless' "relapse" is reasonably underpinned by her near-seduction to Andy Phillips' lighting and the delightful costumes by Randi Cook.

As usual, long passages of this wonderfully subtle text demand considerable patience, but virtue is rewarded thanks not least to Andy Phillips' lighting and the delightful costumes by Randi Cook. Roderick Skeaping's music combines acid commentary with Lunytesque pathos, and the masque is strikingly presented as a company postcard.

## Transatlantic Connections

Max Lopert

The latest series by the New Macnaghten Concerts is proposed under the general title of "Transatlantic Connections." It is an attractively loose, capacious theme; and in the first of its six concerts, by the Albany Brass Ensemble at the Wigmore Hall on Monday, brass quintette by Maxwell Davies and Elliott Carter provided a suitable and stirring central juxtaposition.

Maxwell Davies' quintet (1981), longest and most taxing piece on the bill, aims to draw from a brass ensemble the chamber-music intimacy and concentration of argument normally associated with less assertive instrumental combinations. It is at once a formidable and an exhilarating, stirring achievement—

the natural hubbub of a brass quintet is disciplined into three tautly held movements haunted by so much recent Maxwell Davies' by "the ghost of sonata form."

There is a marvellous sense of movement sustained and varied in this music—an allegro flung urgently out of introductory trills and whirs, a slow middle movement laid out with an almost Brucknerian grandeur of span, a finale pulsing forward only to be broken off and newly wrought. One immediately feels that this variety derives in every detail from the composer's taming of a brass quintet's natural energies; he has achieved a virtuoso exercise whose deeper purpose is wonderfully plain and un-

adorned.

It was delivered with thrilling technical address and imaginative sympathy, but Maxwell Davies had already followed a busy new piece, *Gosforth Rhapsody* (rather like Arthur Benjamin's *Jamaican Rumba* rendered "fashionably minimalist") by Steven Ingham, and by the close of the first half, lips and tongues had been given a heavy workout. Perhaps it was for this reason that the Carter quintet (1974) emerged thereafter far heavier and blunter than the score would appear to warrant; the outlines of its brilliantly good-humoured discourse were confidently laid out, but the light fine scurries of its dramatic detail were regularly thickened.

## Lindsay Kemp/Sadler's Wells

Martin Hoyle

Lindsay Kemp divides critical opinion right down the middle. His latest offering, a double bill of the Walton/Sitwell *Façade* and a newly-devised showcase, Nijinsky the Fool, neatly epitomises both the magic and the self-indulgence of his anything-goes dive into the conjuror's top-hat of theatrical tricks. At best his reminders of harlequinade and pantomime are infectiously enjoyable; at worst his prima donna set smacks of monumental andaricia. Here it doesn't quite come off.

The entertaining *Façade* is an object lesson in restraint. It is fully clothed and, as far as one can tell, sexually orthodox. Sensibly realising that Wunderkind Walton and the genteelly iconoclastic Sitwell could beat him at his own game, Mr Kemp does it straight, linking the poems on the thread of an Edwardian family outing to the seaside.

Time was when his points of visual reference would have been Beardsley and Donald McGill; here he evokes both the sleekly enamelled ambivalence of Kai Nielsen's illustrations and the sturdy Englishness of the sculptor Sam Smith, whose chunky toy-like wooden models sum up a whole mythology of striped bathing-suits, boys in sailor suits and masters in candy-stripe blazers. Emmanuel Luzzati's sets and costumes add a mischievous sparkle to the reciter Vivien Dixon battled to be heard—too much!

In the second piece Mr Kemp plays Nijinsky mad and fantasising, which avoids the necessity of dancing. Neil Caparo's slyly mouthing, Blighie/Dr Miracile/Svengali is effective in the noiseless scream of his death; a Harlequin figure and a ballerina represent Nijinsky's music and emotional fulfilment respectively, and Carlo Mirante's score unwisely recalls royal ballet in snatches from Weber, Rimsky-Korsakov and Stravinsky. There is much bawling and anguish; but not very much of substance. Go for the first half. *Façade* has ten times the talent of *Cats*.

event (for the Swiss yodelling song) a pantomime cow do much to justify the programme note's claim to equal partnership with Walton and Sitwell. The Koenig Ensemble accompaniment with gusto, occasionally—as in "Scotch Rhapsody" where the reciter Vivien Dixon battled to be heard—too much!

In the second piece Mr Kemp plays Nijinsky mad and fantasising, which avoids the necessity of dancing. Neil Caparo's slyly mouthing, Blighie/Dr Miracile/Svengali is effective in the noiseless scream of his death; a Harlequin figure and a ballerina represent Nijinsky's music and emotional fulfilment respectively, and Carlo Mirante's score unwisely recalls royal ballet in snatches from Weber, Rimsky-Korsakov and Stravinsky. There is much bawling and anguish; but not very much of substance. Go for the first half. *Façade* has ten times the talent of *Cats*.

On Your Toes (Virginia) Gallan Parsons with probably a genuine Russian accent leads an exuberant cast in the remake of Rogers and Hart's 1936 sendup of Russian ballet tour. Complete with Slaughter on Tenth Avenue choreographed by George Balanchine and directed, like the original, by George Abbott. (977 9370).

Brighton Beach Memoirs (Neil Simon): If he wasn't sure before playwright Neil Simon can expect a lot more of his funny as well as touching childhood reminiscence now that the Netherlander organization generously decided to name the career of a 1960s female pop group, a la Supremes, without the quality of their music. (239 6200).

Nine (46th St): Two dozen women surround Sergio Franchi in this Tony-award winning musical version of the Fellini film 8½, which like the original celebrates creativity, here as a series of Tommy Tune's exciting scenes. (246 0246).

Cats (Winter Garden): Director Trevor Nunn, fresh from the Broadway success of Nicholas Nickleby, has his imaginative and frisky cats stalk, slide and dance their way across a transfigured stage in this lavish re-

creation of the London hit. (239 6226). Extremities (West Side Arts, 43rd of 9th Av.): The realistic portrayal of sadistic rape with which the play opens makes for uncomfortable but rich drama, and author William Mastrosimone's commitment to maintain high energy levels to challenge an excellent cast. (541 8336).

2nd Street (Majestic): An immodest celebration of the heyday of Broadway in the '30s incorporates gems from the original film like Shuffle Off to Buffalo with the appropriately brash and leggy hoofing by a large chorus line. (977 9320).

Torch Song Trilogy (Helen Hayes): Harvey Fierstein's ebullient and touching story of a drag queen from backstage to loneliness in between, down to the confrontation with his doting Jewish mother. (944 9450).

Dreamgirls (Imperial): Michael Bennett's latest musical has now become a stalwart Broadway presence despite the forced effort to recreate the career of a 1960s female pop group, a la Supremes, without the quality of their music. (239 6200).

A Chorus Line (Shubert): The longest-running musical ever in America has not only supported Joseph Papp's Public Theater for eight years but also updated the musical genre with its backstage story in which the songs are used as auditions rather than emotions. (239 6200).

Noises Off (Eisenhower): Dorothy Loudon stars in Michael Frayn's comedy about the provincial run of a slapstick farce with lots of antics for a company that includes Brian Murray, Paxton Whitehead and Victor Garber. Ends Nov 27. (254 3870).

## CHICAGO

E. E. Forum: Moving into its second

year parodying melodrama in a hospital setting, this emergency room continues its adventures among a young doctor, a receptionist and an amateur actress. (409 3000).

A Raft in the Sun (Goodman): season opens with the 25th anniversary of Loraine Hansberry's play of the same name. (757 9230).

12 Butter-tin for the swagman? (3-3)

13 Sound commercial craze (3)

14 Daff of revolutionary deed (4)

15 Learned to tie ridge knot? (7)

16 Short hypothetical layer displayed by Kennedy Headside (6)

17 Setback for Dutch uncle, low (3)

18 Curtailed table-waiters from Vichy—Dramatic scenes! (8)

19 Cupids painted at Rome, it turns out (8)

20 Describing old letters that excited Magic Circle? (6)

21 MP's in motion? (8)

22 Plastered and pebbled-dashed (6)

23 Take in "Sailor's World"? (6)

24 Deprived of cap round head of Frenchman (6)

25 Enclosure give one a start (6)

26 Bed and breakfast with nest compartment for hats (4-3)

27 Sit as judge in Oswestry (3)

28 Letter lost in the middle (3)

29 Seeing faculty boat-crew taking acquisitive sort of man on board (8)

30 Polcemen, in limit of endurance, ensured obedience to the law (8)

31 Take in "Sailor's World"? (6)

32 Low rumbling sound of German dam (6)

33 Solution to puzzle No. 5,251

34 Enclosure give one a start (6)

35 Bed and breakfast with nest compartment for hats (4-3)

36 Sit as judge in Oswestry (3)

37 Letter lost in the middle (3)

38 Seeing faculty boat-crew taking acquisitive sort of man on board (8)

39 Polcemen, in limit of endurance, ensured obedience to the law (8)

40 Organised detectives rank (6)

41 Mail—a sort of drive (6)

42 Scotch governors? (6)

43 Betting-odds at bookies'

## F.T. CROSSWORD PUZZLE No. 5,252

### ACROSS

1 Scheherazade, for instance, has to wager about everything (6)

4 Four jabs made it a marvelous sort of day for Carroll (8)

9 Fanciful tale about marines band on sleeve (6)

10 Forebear partly enhances Tory reputation (8)

11 Caveman first rated in 1830? (6)

12 Butter-tin for the swagman? (3-3)

13 Sound commercial craze (3)

14 Daff of revolutionary deed (4)

15 Learned to tie ridge knot? (7)

16 Short hypothetical layer displayed by Kennedy Headside (6)

17 Setback for Dutch uncle, low (3)

18 Curtailed table-waiters from Vichy—Dramatic scenes! (8)

19 Cupids painted at Rome, it turns out (8)

20 Describing old letters that excited Magic Circle? (6)

21 MP's in motion? (8)

22 Plastered and pebbled-dashed (6)

23 Take in "Sailor's World"? (6)

24 Deprived of cap round head of Frenchman (6)

25 Low rumbling sound of German dam (6)

26 Bed and breakfast with nest compartment for hats (4-3)

27 Sit as judge in Oswestry (3)

28 Letter lost in the middle (3)

29 Seeing faculty boat-crew taking acquisitive sort of man on board (8)

30 Polcemen, in limit of endurance, ensured obedience to the law (8)

31 Organised detectives rank (6)

32 Mail—a sort of drive (6)

33 Scotch governors? (6)

34 Betting-odds at bookies'

35 Letter lost in the middle (3)

36 Seeing faculty boat-crew taking acquisitive sort of man on board (8)

37 Polcemen, in limit of endurance, ensured obedience to the law (8)

38 Organised detectives rank (6)

39 Take in "Sailor's World"? (6)

40 Deprived of cap round head of Frenchman (6)

41 Letter lost in the middle (3)

42 Seeing faculty boat-crew taking acquisitive sort of man on board (8)

43 Polcemen, in limit of endurance, ensured obedience to the law (8)

44 Organised detectives rank (6)

45 Mail—a sort of drive (6)

46 Scotch governors? (6)

47 Betting-odds at bookies'

48 Letter lost in the middle (3)

49 Seeing faculty boat-crew taking acquisitive sort of man on board (8)

50 Polcemen, in limit of endurance, ensured obedience to the law (8)

51 Organised detectives rank (6)

52 Mail—a sort of drive (6)

53 Scotch governors? (6)

54 Betting-odds at bookies'

55 Letter lost in the middle (3)

Argentina fails  
to meet loan  
terms, Page 36

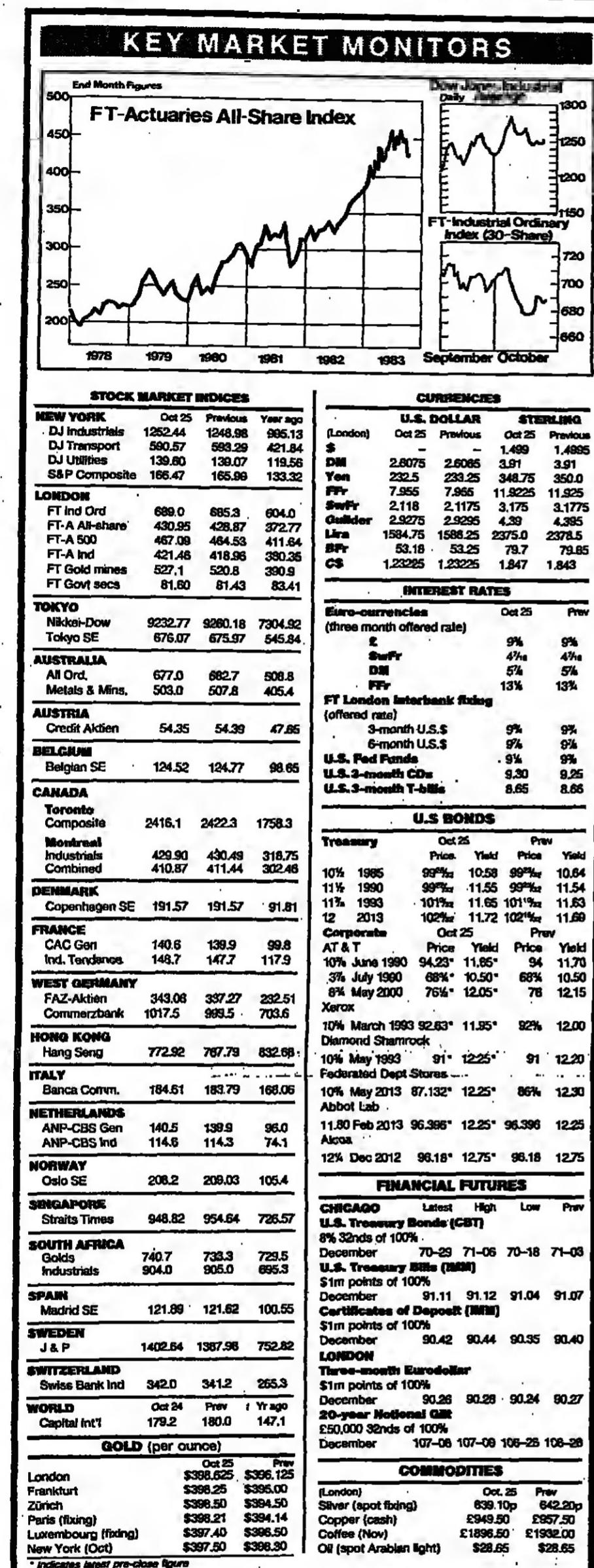
## SECTION III - INTERNATIONAL MARKETS

# FINANCIAL TIMES

Wednesday October 26 1983

NEW YORK STOCK EXCHANGE 26-28  
AMERICAN STOCK EXCHANGE 27-28  
WORLD STOCK MARKETS 28  
LONDON STOCK EXCHANGE 29-32  
UNIT TRUSTS 32-33  
COMMODITIES 34  
CURRENCIES 35  
INTERNATIONAL CAPITAL MARKETS 36

20



### WALL STREET

#### Exxon helps sustain optimism

Wall Street attempted to move higher yesterday but proved unable to shake off the uncertainties surrounding the latest events in Beirut and Grenada. Stocks advanced at mid-session but with the bond market again weak, the final hour of trading saw stock prices slipping back from their first level. There were sharp falls in rail and airline issues.

Good results from Exxon, the world's largest oil company, at first sustained the optimism which had greeted trading reports from General Motors and Merrill Lynch.

The Dow Jones Industrial average ended the session a net 3.46 higher at 1,254.44, having touched 1,258.64 earlier. Turnover was disappointing with only 82.7m shares traded, stocks with gains totalled 874 compared with 893 with losses.

But prices also benefited from short covering operations by the sellers of the past two sessions.

Market indices were helped by a good performance from several leading stocks. IBM at \$128.84 put on 8% in heavy trading after widespread comment in the investment press helped the stock back to market favour. Sears, the store and financial services group, added 5% to \$40.44 in continued response to results, and Merrill Lynch at \$31.14 added a further 5% reflecting the market's relief that third-quarter outcome was no worse than reported.

The rise in the market index seemed to outstrip the confidence on the trading floor, however. Turnover was slow to catch fire after a promising start, and dealers noted that trading in stock market index futures showed a volatile trend.

The bond market had another weak session. The day opened with a news of a rise in the consumer price index - a discouraging indication of inflation trends - and prices sagged afresh at mid-session when Mr Donald Regan, the Treasury Secretary, warned the market to expect about \$15bn in new funding today.

Exxon closed 5% down, to \$39.4% and Standard Oil of California remained unchanged at \$38.4% following their profits figure. Standard Ohio put on 5% to \$53.4% while awaiting results.

Motor issues remained firm behind GM, 5% up at \$78 on Monday's results.

Ford, with results due shortly, added 5% to \$89.4% while American Motors at \$84 were 5% up on the quarterly statement.

Trading results from across the full range of U.S. industry found a response in most sectors of the industrial stocks.

Borg-Warner added 5% to \$48 on the board forecast of a record year, and Wheeling Pittsburgh held steady at \$23.4% after reporting the latest loss figures.

Trading results also brought gains in Loral, the defence electronics group, 5% up at \$27.4%. I.U. International, 5% up at \$26. White Consolidated, 5% up at \$43.4%, Consolidated Edison, 5% up at \$25.4%, and American Savings and Loan, 5% up at \$14.4%.

But Melville weakened by 5% to \$36.4% and Mattel, the toy and electronic games manufacturer, fell 5% to \$55 after confirming reports of planned disposals.

Shares in Warner Lambert, the medical care group, were active but held unchanged at \$29.4% after news of higher earnings. Diamond Shamrock at \$24% were also unaffected by results.

Other features included Western

Union, 5% up at \$33 despite a denial from Signal of bid intentions. Hyster added 5% to \$65 on news of a rival buyout offer. High on the list of active stocks was new issue, Circus Enterprises, the Las Vegas casino operator, at \$18.4%.

The long end of the bond market fell away again although prices steadied at mid-session when the Commerce Department disclosed a 0.5 per cent fall in orders for durable goods - seen as a welcome sign of slackening in the tempo of the industrial upturn.

The key long bond picked up from 101 1/2 to 102%, yielding 11.74 per cent against 11.72 per cent overnight.

Once again the short end held fairly steady. The three-month Treasury Bill was little changed at a discount of 8.85 per cent, while the six-month bill at 8.88 per cent was a shade lower on the day.

The market made little response to a further \$2.5bn in customer repurchases from the Federal Reserve although the Federal Funds rate slackened to 9% per cent.

The advance was led by foods, oils and electricals. Bongrain added FF 48 to FF 1,588, Esso FF 11.50 to FF 347.50, CEP FF 2.70 to FF 153.20, Thomson-CSF FF 4.20 to FF 173 and Radiotechnique FF 10 to FF 394.

Prices ended firmer on the day in Amsterdam although some early advances were pared on concern over interest rate developments.

The Swedish Government's announcement of changes in capital gains tax rules and plans for a share turnover tax made for fluctuations in Stockholm.

After stronger opening, many leading shares tailed off towards the close on uncertainty about today's further economic package from the Government.

Milan ended the official session slightly higher, although prices continued their rise in after-bourse trading. Industrials and some major insurance issues gained strongly, recouping much of the ground they lost on Monday. A similar, slightly higher trend emerged in Madrid though trading was quiet.

In Zurich, prices closed narrowly mixed in subdued trading. Bank shares were the only issues to remain mostly steady against the downturn, although even they were only lightly traded.

Another mixed picture emerged in Brussels with holding companies, chemicals and non-ferrous metals all losing ground.

In Copenhagen, shares rose sharply as investor fears of an early election receded, following the minority Government's agreement with other parties on an economic austerity package.

### HONG KONG

Some DOMESTIC bargain hunting allowed shares to close steady in Hong Kong after an easier opening. The Hang Seng index ended 5.13 ahead on the day at 1,081.9, set in September 1980.

The FAZ index of 100 shares set a fifth consecutive record, adding 5.79 to 343.06.

The day's buying was broadly spread, although profit-taking was also seen, particularly in Daimler-Benz after its DM 40 surge on Monday. It closed down DM 9.80 at DM 692.20, but BMW picked up another DM 5.30 to DM 417.30 and VW added DM 2.70 to DM 227.

There was strong foreign demand for Siemens, which recorded a DM 14.80 rise to DM 392.30 - a rise of more than DM 40 so far this month.

The FAZ index of 100 shares set a fifth consecutive record, adding 5.79 to 343.06.

The day's buying was broadly spread, although profit-taking was also seen, particularly in Daimler-Benz after its DM 40 surge on Monday. It closed down DM 9.80 at DM 692.20, but BMW picked up another DM 5.30 to DM 417.30 and VW added DM 2.70 to DM 227.

There was strong foreign demand for Siemens, which recorded a DM 14.80 rise to DM 392.30 - a rise of more than DM 40 so far this month.

The market now expects shares to stabilise within the index range of 780 to 790 until the next round of Sino-British talks on the colony's future, which are scheduled for November 14.

### SINGAPORE

UNCERTAINTY OVER the market's outlook kept Singapore investors on the sidelines and shares ended slightly lower. The Straits Times Industrial index closed 5.62 lower at \$48.82.

All sectors were lower. Development Bank fell 3 cents to \$89.05 while Fraser and Neave, Keck Seng and Overseas Chinese Bank lost 10 cents each to \$56.05 and ERA 5 cents easier at \$1.63.

The market now expects shares to stabilise within the index range of 780 to 790 until the next round of Sino-British talks on the colony's future, which are scheduled for November 14.

### CANADA

GOLD shares led a strong mid-session advance in Toronto yesterday with metals and minings adding further support. The oil and gas sector was weaker, with Dome Canada 5% off at \$35.4% and Canada Northwest Energy 5% lower at \$28.6, after failing to find commercial quantities of oil at its Bay of Biscay well, which it has now abandoned.

Industrial and utilities performed well in Montreal although banks and papers were weaker.

**SOUTH AFRICA**

POLITICAL developments in the Caribbean and the Middle East failed to brighten gold mine issues in Johannesburg yesterday and most closed below their day's highs.

Free State Geduld added R2 to R44,

while Randfontein Estates was unchanged at R128. Platinum stocks edged higher, with Rustenburg 10 cents up at R11.40.

LEADING equities and gilt-edged securities moved higher in London as investors shrugged off worries about more expensive U.S. credit. The FT Industrial Ordinary index gained 3.7 to 689.

Stores attracted institutional interest

on the hope of buoyant Christmas spending, although Latin American debt

uncertainties proved a source of worry.

Details, Page 29; Share Information Service, Pages 30-31.

### TOKYO

#### Cancer link report spurs downturn

SHARES OPENED higher in Tokyo yesterday with blue chips in the lead, but heavy selling of food-related issues in the afternoon pulled the market down, writes Shigeo Nishiwaki of *Yomiuri*.

The Nikkei-Dow Jones market average, which advanced 22.36 points during the morning, closed lower on balance for the third successive session, slipping 27.39 to 9,232.77. Volume recovered slightly from Monday's record low of 139,066 shares to 192,494.

The firm opening came after a strong overnight performance on Wall Street, in the face of a bulge in the U.S. money supply and growing tension in the Middle East. But market sentiment was depressed in the afternoon by the Japanese Cancer Association's announcement that glutamic acid had been found to be carcinogenic.

Ajinomoto, which produces food seasoning with glutamic acid as the main ingredient, moved the maximum Y100 down to Y860. Among other casualties were Asahi Chemical, Y27 down at Y345, Kyowa Hakko Y30 off at Y755 and Takeiwa Chemical down Y12 to Y757.

Faced by blue-chip issues, share prices moved higher in early trading across a broad front, but eased in the afternoon. Fuji Photo Film again rose above the Y2,000 level to Y2,010 up Y50 from Monday's close. Electricals closed firmer almost across the board.

Motor issues generally benefited from higher output of four-wheeled cars, with Toyota Motor adding Y10 to Y1,240, Nissan Motor Y5 to Y705 and Honda Motor Y10 to Y1,010.

Elsewhere, oil attracted buyers on speculation that the planned refining tie-up between Maruzen Oil and Daikyo Oil might bring greater stability to oil prices. During the afternoon, however, these issues came under heavy selling pressure. Nippon Oil closed Y30 off at Y1,140, while trading in stocks of Maruzen Oil and Daikyo Oil was suspended throughout the day.

Bond prices initially eased as investors again stepped to the sidelines. But as the yen firmed against the dollar, bond prices edged higher in the afternoon.

The yield of the bellwether 7.5 per cent long-term government bond maturing in January 1993 consequently fell from Monday's 7.71 per cent to 7.745 per cent. The firming was underpinned by heavy purchases by some securities firms.

In the absence of any positive motivations, bond prices seem likely to remain at a standstill, with market yields hovering at around present levels.

### LONDON

#### Equities consolidate

LEADING equities and gilt

## **NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES**

**PROPOSED FINANCIAL TIMES SURVEYS**  
**on**  
**COMPUTERS & ELECTRONICS - 1984**

- |             |   |             |   |
|-------------|---|-------------|---|
| 16 January  | The Desk-Top Revolution—<br>Personal Computers for the<br>Businessman | 12 October  | Scottish Electronic Industry<br>Development |
| 17 February | Electronic Components   | 22 October  | Communications in Business                  |
| 28 March    | Electronics in Europe   | 31 October  | Software and Services                       |
| 24 April    | Computers in Banking and<br>Finance                                   | 8 November  | Mobile Communications                       |
| 13 June     | Video and Broadcasting  | 19 November | Office Equipment                            |
|             |   | 6 December  | Electronic Information Services             |
|             |   | 14 December | Large Computers—the way<br>ahead            |

*Synopses for these Surveys will be available approximately three months prior to publication.  
If you wish to have a synopsis or require information on advertising, please contact:*

Peter d'Aguilar  
Financial Times, Bracken House, 10 Cannon Street, London EC4P 4BY  
Tel: 01-243 8000 ext. 4181 Telex: 885033 FINTIM G

**FINANCIAL TIMES**  
EUROPE'S BUSINESS NEWSPAPER

The size, contents and publication dates of all Surveys are subject to change at the discretion of the Editor

Continued on Page 23

Financial Times Wednesday October 26 1983

## AMERICAN STOCK EXCHANGE COMPOSITE CLOSING PRICES

AMERICAN STOCK EXCHANGE COMPOSITE CLOSING PRICES									
12 Month High	Low	Stock	Dv.	Yld.	P/E	100s High	100s Low	Close Price	Chg. Prc.
42	42	AAC	1.9	12	10	95	94	94	+1
43	43	ACF	1.9	12	10	95	94	94	+1
44	44	ATI	1.9	12	10	95	94	94	+1
45	45	Action	1.9	12	10	95	94	94	+1
46	46	Action	1.9	12	10	95	94	94	+1
47	47	Action	1.9	12	10	95	94	94	+1
48	48	Action	1.9	12	10	95	94	94	+1
49	49	Action	1.9	12	10	95	94	94	+1
50	50	Action	1.9	12	10	95	94	94	+1
51	51	Action	1.9	12	10	95	94	94	+1
52	52	Action	1.9	12	10	95	94	94	+1
53	53	Action	1.9	12	10	95	94	94	+1
54	54	Action	1.9	12	10	95	94	94	+1
55	55	Action	1.9	12	10	95	94	94	+1
56	56	Action	1.9	12	10	95	94	94	+1
57	57	Action	1.9	12	10	95	94	94	+1
58	58	Action	1.9	12	10	95	94	94	+1
59	59	Action	1.9	12	10	95	94	94	+1
60	60	Action	1.9	12	10	95	94	94	+1
61	61	Action	1.9	12	10	95	94	94	+1
62	62	Action	1.9	12	10	95	94	94	+1
63	63	Action	1.9	12	10	95	94	94	+1
64	64	Action	1.9	12	10	95	94	94	+1
65	65	Action	1.9	12	10	95	94	94	+1
66	66	Action	1.9	12	10	95	94	94	+1
67	67	Action	1.9	12	10	95	94	94	+1
68	68	Action	1.9	12	10	95	94	94	+1
69	69	Action	1.9	12	10	95	94	94	+1
70	70	Action	1.9	12	10	95	94	94	+1
71	71	Action	1.9	12	10	95	94	94	+1
72	72	Action	1.9	12	10	95	94	94	+1
73	73	Action	1.9	12	10	95	94	94	+1
74	74	Action	1.9	12	10	95	94	94	+1
75	75	Action	1.9	12	10	95	94	94	+1
76	76	Action	1.9	12	10	95	94	94	+1
77	77	Action	1.9	12	10	95	94	94	+1
78	78	Action	1.9	12	10	95	94	94	+1
79	79	Action	1.9	12	10	95	94	94	+1
80	80	Action	1.9	12	10	95	94	94	+1
81	81	Action	1.9	12	10	95	94	94	+1
82	82	Action	1.9	12	10	95	94	94	+1
83	83	Action	1.9	12	10	95	94	94	+1
84	84	Action	1.9	12	10	95	94	94	+1
85	85	Action	1.9	12	10	95	94	94	+1
86	86	Action	1.9	12	10	95	94	94	+1
87	87	Action	1.9	12	10	95	94	94	+1
88	88	Action	1.9	12	10	95	94	94	+1
89	89	Action	1.9	12	10	95	94	94	+1
90	90	Action	1.9	12	10	95	94	94	+1
91	91	Action	1.9	12	10	95	94	94	+1
92	92	Action	1.9	12	10	95	94	94	+1
93	93	Action	1.9	12	10	95	94	94	+1
94	94	Action	1.9	12	10	95	94	94	+1
95	95	Action	1.9	12	10	95	94	94	+1
96	96	Action	1.9	12	10	95	94	94	+1
97	97	Action	1.9	12	10	95	94	94	+1
98	98	Action	1.9	12	10	95	94	94	+1
99	99	Action	1.9	12	10	95	94	94	+1
100	100	Action	1.9	12	10	95	94	94	+1
101	101	Action	1.9	12	10	95	94	94	+1
102	102	Action	1.9	12	10	95	94	94	+1
103	103	Action	1.9	12	10	95	94	94	+1
104	104	Action	1.9	12	10	95	94	94	+1
105	105	Action	1.9	12	10	95	94	94	+1
106	106	Action	1.9	12	10	95	94	94	+1
107	107	Action	1.9	12	10	95	94	94	+1
108	108	Action	1.9	12	10	95	94	94	+1
109	109	Action	1.9	12	10	95	94	94	+1
110	110	Action	1.9	12	10	95	94	94	+1
111	111	Action	1.9	12	10	95	94	94	+1
112	112	Action	1.9	12	10	95	94	94	+1
113	113	Action	1.9	12	10	95	94	94	+1
114	114	Action	1.9	12	10	95	94	94	+1
115	115	Action	1.9	12	10	95	94	94	+1
116	116	Action	1.9	12	10	95	94	94	+1
117	117	Action	1.9	12	10	95	94	94	+1
118	118	Action	1.9	12	10	95	94	94	+1
119	119	Action	1.9	12	10	95	94	94	+1
120	120	Action	1.9	12	10	95	94	94	+1
121	121	Action	1.9	12	10	95	94	94	+1
122	122	Action	1.9	12	10	95	94	94	+1
123	123	Action	1.9	12	10	95	94	94	+1
124	124	Action	1.9	12	10	95	94	94	+1
125	125	Action	1.9	12	10	95	94	94	+1
126	126	Action	1.9	12	10	95	94	94	+1
127	127	Action	1.9	12	10	95	94	94	+1
128	128	Action	1.9	12	10	95	94	94	+1
129	129	Action	1.9	12	10	95	94	94	+1
130	130	Action	1.9	12	10	95	94	94	+1
131	131	Action	1.9	12	10	95	94	94	+1
132	132	Action	1.9	12	10	95	94	94	+1
133	133	Action	1.9	12	10	95	94	94	+1
134	134	Action	1.9	12	10	95	94	94	+1
135	135	Action	1.9	12	10	95	94	94	+1
136	136	Action	1.9	12	10	95	94	94	+1
137	137	Action	1.9	12	10	95	94	94	+1
138	138	Action	1.9	12	10	95	94	94	+1
139	139	Action	1.9	12	10	95	94	94	+1
140	140	Action	1.9	12	10	95	94	94</td	





International Financier  
**DAIWA**  
SECURITIES

## BRITISH FUNDS

	High	Low	Stock	Price	+/-	Yield	Int.	Rate
<b>"Shorts" (Lives up to Five Years)</b>								
100-4	94	89	Exch. 1 Dec 1985	100.00	-10.00	4.39		
100-4	95	89	Exch. 1 Dec 1986	100.00	-10.00	4.39		
101-4	95	92	Exch. 1 Nov 1984	100.00	-10.00	4.39		
102-4	100	95	Exch. 1 Dec 1984	100.00	-10.00	4.39		
103-4	100	95	Exch. 1 Dec 1985	100.00	-10.00	4.39		
104-4	100	95	Exch. 1 Dec 1986	100.00	-10.00	4.39		
105-4	100	95	Exch. 1 Dec 1987	100.00	-10.00	4.39		
106-4	100	95	Exch. 1 Dec 1988	100.00	-10.00	4.39		
107-4	100	95	Exch. 1 Dec 1989	100.00	-10.00	4.39		
108-4	100	95	Exch. 1 Dec 1990	100.00	-10.00	4.39		
109-4	100	95	Exch. 1 Dec 1991	100.00	-10.00	4.39		
110-4	100	95	Exch. 1 Dec 1992	100.00	-10.00	4.39		
111-4	100	95	Exch. 1 Dec 1993	100.00	-10.00	4.39		
112-4	100	95	Exch. 1 Dec 1994	100.00	-10.00	4.39		
113-4	100	95	Exch. 1 Dec 1995	100.00	-10.00	4.39		
114-4	100	95	Exch. 1 Dec 1996	100.00	-10.00	4.39		
115-4	100	95	Exch. 1 Dec 1997	100.00	-10.00	4.39		
116-4	100	95	Exch. 1 Dec 1998	100.00	-10.00	4.39		
117-4	100	95	Exch. 1 Dec 1999	100.00	-10.00	4.39		
118-4	100	95	Exch. 1 Dec 2000	100.00	-10.00	4.39		
119-4	100	95	Exch. 1 Dec 2001	100.00	-10.00	4.39		
120-4	100	95	Exch. 1 Dec 2002	100.00	-10.00	4.39		
121-4	100	95	Exch. 1 Dec 2003	100.00	-10.00	4.39		
122-4	100	95	Exch. 1 Dec 2004	100.00	-10.00	4.39		
123-4	100	95	Exch. 1 Dec 2005	100.00	-10.00	4.39		
124-4	100	95	Exch. 1 Dec 2006	100.00	-10.00	4.39		
125-4	100	95	Exch. 1 Dec 2007	100.00	-10.00	4.39		
126-4	100	95	Exch. 1 Dec 2008	100.00	-10.00	4.39		
127-4	100	95	Exch. 1 Dec 2009	100.00	-10.00	4.39		
128-4	100	95	Exch. 1 Dec 2010	100.00	-10.00	4.39		
129-4	100	95	Exch. 1 Dec 2011	100.00	-10.00	4.39		
130-4	100	95	Exch. 1 Dec 2012	100.00	-10.00	4.39		
131-4	100	95	Exch. 1 Dec 2013	100.00	-10.00	4.39		
132-4	100	95	Exch. 1 Dec 2014	100.00	-10.00	4.39		
133-4	100	95	Exch. 1 Dec 2015	100.00	-10.00	4.39		
134-4	100	95	Exch. 1 Dec 2016	100.00	-10.00	4.39		
135-4	100	95	Exch. 1 Dec 2017	100.00	-10.00	4.39		
136-4	100	95	Exch. 1 Dec 2018	100.00	-10.00	4.39		
137-4	100	95	Exch. 1 Dec 2019	100.00	-10.00	4.39		
138-4	100	95	Exch. 1 Dec 2020	100.00	-10.00	4.39		
139-4	100	95	Exch. 1 Dec 2021	100.00	-10.00	4.39		
140-4	100	95	Exch. 1 Dec 2022	100.00	-10.00	4.39		
141-4	100	95	Exch. 1 Dec 2023	100.00	-10.00	4.39		
142-4	100	95	Exch. 1 Dec 2024	100.00	-10.00	4.39		
143-4	100	95	Exch. 1 Dec 2025	100.00	-10.00	4.39		
144-4	100	95	Exch. 1 Dec 2026	100.00	-10.00	4.39		
145-4	100	95	Exch. 1 Dec 2027	100.00	-10.00	4.39		
146-4	100	95	Exch. 1 Dec 2028	100.00	-10.00	4.39		
147-4	100	95	Exch. 1 Dec 2029	100.00	-10.00	4.39		
148-4	100	95	Exch. 1 Dec 2030	100.00	-10.00	4.39		
149-4	100	95	Exch. 1 Dec 2031	100.00	-10.00	4.39		
150-4	100	95	Exch. 1 Dec 2032	100.00	-10.00	4.39		
151-4	100	95	Exch. 1 Dec 2033	100.00	-10.00	4.39		
152-4	100	95	Exch. 1 Dec 2034	100.00	-10.00	4.39		
153-4	100	95	Exch. 1 Dec 2035	100.00	-10.00	4.39		
154-4	100	95	Exch. 1 Dec 2036	100.00	-10.00	4.39		
155-4	100	95	Exch. 1 Dec 2037	100.00	-10.00	4.39		
156-4	100	95	Exch. 1 Dec 2038	100.00	-10.00	4.39		
157-4	100	95	Exch. 1 Dec 2039	100.00	-10.00	4.39		
158-4	100	95	Exch. 1 Dec 2040	100.00	-10.00	4.39		
159-4	100	95	Exch. 1 Dec 2041	100.00	-10.00	4.39		
160-4	100	95	Exch. 1 Dec 2042	100.00	-10.00	4.39		
161-4	100	95	Exch. 1 Dec 2043	100.00	-10.00	4.39		
162-4	100	95	Exch. 1 Dec 2044	100.00	-10.00	4.39		
163-4	100	95	Exch. 1 Dec 2045	100.00	-10.00	4.39		
164-4	100	95	Exch. 1 Dec 2046	100.00	-10.00	4.39		
165-4	100	95	Exch. 1 Dec 2047	100.00	-10.00	4.39		
166-4	100	95	Exch. 1 Dec 2048	100.00	-10.00	4.39		
167-4	100	95	Exch. 1 Dec 2049	100.00	-10.00	4.39		
168-4	100	95	Exch. 1 Dec 2050	100.00	-10.00	4.39		
169-4	100	95	Exch. 1 Dec 2051	100.00	-10.00	4.39		
170-4	100	95	Exch. 1 Dec 2052	100.00	-10.00	4.39		
171-4	100	95	Exch. 1 Dec 2053	100.00	-10.00	4.39		
172-4	100	95	Exch. 1 Dec 2054	100.00	-10.00	4.39		
173-4	100	95	Exch. 1 Dec 2055	100.00	-10.00	4.39		
174-4	100	95	Exch. 1 Dec 2056	100.00	-10.00	4.39		
175-4	100	95	Exch. 1 Dec 2057	100.00	-10.00	4.39		
176-4	100	95	Exch. 1 Dec 2058	100.00	-10.00	4.39		
177-4	100	95	Exch. 1 Dec 2059	100.00	-10.00	4.39		
178-4	100	95	Exch. 1 Dec 2060	100.00	-10.00	4.39		
179-4	100	95	Exch. 1 Dec 2061	100.00	-10.00	4.39		
180-4	100	95	Exch. 1 Dec 2062	100.00	-10.00	4.39		
181-4	100	95	Exch. 1 Dec 2063	100.00	-10.00	4.39		
182-4	100	95	Exch. 1 Dec 2064	100.00	-10.00	4.39		
183-4	100	95	Exch. 1 Dec 2065	100.00	-10.00	4.39		
184-4	100	95	Exch. 1 Dec 2066	100.00	-10.00	4.39		
185-4	100	95	Exch. 1 Dec 2067	100.00	-10.00	4.39		
186-4	100	95	Ex					

**Financial Times Wednesday October 26 1983**

**INDUSTRIALS—Continued**





## COMMODITIES AND AGRICULTURE

### Maize report boosts U.S. grain values

By NANCY DUNNE IN WASHINGTON

**GRAIN** PRICES bounded reduction programme for next upward in early trading on the Chicago Board of Trade yesterday after release of a Department of Agriculture (USDA) report indicating that maize supplies will be even tighter than had been expected.

The department reported record high stocks of old crop maize at 3.1bn bushels, but these were down 0.3bn from previous forecasts. Stocks of 1982 wheat stood at 2.95bn bushels, 1 per cent below last year at this time, and slightly below what had been predicted.

USDA said maize stocks have been depleted by higher-than-expected feed usage during the summer drought. Feed usage, which had been forecast for 4.5bn bushels this year, was instead, an estimated 4.77bn bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

In view of the reduced grain supplies, resulting from both the drought and the payment-in-kind (Pik) programme, the Department of Agriculture has designed a very skimpy acreage

### Uncertainty on potato crop continues

By Barbara Dalzell

**POTATO** Marketing Board (PMB) supply estimates released yesterday indicate that main crop yield may be slightly higher than expected earlier.

The board's latest tonnes-per-hectare estimate to come in September is 32.3 tonnes, with an estimated 33.3 tonnes by the end of the season. This improves the 29.8 tonnes figure given in September, but is well down on the record 41.8 tonnes per hectare in 1982 for the PMB planned area main crop.

The board is reluctant to assess overall yield at this stage.

"With an estimated 60,000 hectares of the main crop destined for winter storage still in the ground at October 21, there remains considerable uncertainty about final production levels," it says.

However, the board earlier this year estimated plantings at 164,995 hectares. On yesterday's figures, total output would be a total yield of 4.9m tonnes to 4.8m tonnes.

This would still give lower production than usual, although plantings this year were 2,740 hectares up on last year.

Poor growing conditions have caused considerable setbacks to this year's crop, with heavy rain in spring delaying planting and hampering root development and the summer drought stunting development and growth.

On the London potato futures market yesterday, the April position closed at £21.22 a tonne, up from the day's low of £20.5. The previous close was £21.22. Yesterday was a hazy day, with 1,118 contracts traded for April and 944 sold for other positions.

Three months zinc touched a new nine-month high of £608 before easing to close marginally lower.

Barley fut. Jan. £119.50; Maize fut. Jan. £145.00; Wheat fut. Jan. £123.70; Wheat fut. Jun. £122.50.

Mr William Lester, assistant agriculture secretary, has said that the administration would accept a more attractive wheat programme in exchange for reduced target prices, which next year. However, the department is unlikely to support any such a bill under consideration which would promote reduction of maize production.

The current USDA maize programme for next year asks farmers to limit production on 10 per cent of their land but offers no crops or cash in return.

### Spain looks forward to bumper citrus crop

BY OUR CORRESPONDENT

**SPAIN** has high hopes for the 1983-84 citrus crop. It is expected to be 11.5 per cent heavier than last season and could produce a record 3.3m tonnes.

A few years ago, such a prospect would have alarmed Spanish producers and exporters—especially since the increase is not confined to the mandarin varieties winning increasing popularity in the British market. Increased production of the more traditional naval types, for which demand has been almost static, is also expected.

The board's latest tonnes-per-hectare estimate to come in September is 32.3 tonnes, with an estimated 33.3 tonnes by the end of the season. This improves the 29.8 tonnes figure given in September, but is well down on the record 41.8 tonnes per hectare in 1982 for the PMB planned area main crop.

This year, however, the Spaniards are confident that their crop will score on both volume and value, because of reforms in citrus production and marketing initiated a decade ago.

The most obvious change is in varietal patterns. Types fashionable years ago, such as blood oranges, have been phased out in favour of soft

citrus, including satsumas and clementines, which offer the best hope of lifting British citrus consumption from its present 10kg a head annually to a level approaching that of the French and Germans, who eat four times as much.

The 350,000-tonne increase looks formidable enough against last year's production of just over 3m tonnes, and even more so in relation to Britain's 1982-83 intake of 162,000 tonnes, worth about £10m wholesale.

In other European markets where citrus is better established there may be problems disposing of the extra 165,000 tonnes of navels, though the figure will be partly offset by falls amounting to almost 6 per cent of 9,000 tonnes, in satsumas, clementinas and other blood oranges.

Britain, however, should be receptive to the extra mandarins that will arrive here as a result of a 12 per cent larger harvest of satsumas and 6 per cent more

prices that will inhibit consumption without hitting Spain's effective devaluation.

On balance, because of sterling's strength, citrus should mean value for British consumers, albeit at the expense of the producers and exporters.

The quality of the Spanish crop looks good, at present, with cultural conditions favourable. Climate permitting, the season should see further improvement in quality from such factors as heavier applications of fertilisers, more scientific use of the plentiful irrigation water, and other benefits materialising from research.

None of the major citrus exporting countries shows signs this year of a crop failure that could help the others, but a bonus from another quarter is Israel's recent devaluation of 23 per cent following one in August of 7.5 per cent, and a doubling of domestic food

prices is likely to inhibit citrus consumption.

© **PARAGUAY'S** coffee crop is likely to fall well short of the large 8.5m bags. Trade estimates put it at about 3.8m to 4.5m bags.

© **MAIN CEREAL** drillings in England and Wales are complete, with only pan-root crops remaining.

© **CHINA HAS** tentatively agreed to import 100,000-150,000 tonnes of maize, 100,000-150,000 tonnes of rice, 50,000-60,000 tonnes of raw sugar and 30,000 tonnes of rubber from Thailand in 1984.

© **MRI LESLIE PRICE** has been reappointed chairman of the Australian Wheat Board.

© **SOUTH KOREAN** rice production is expected to be 5.5m tonnes in 1983, up 4.2 per cent from 5.15m tonnes last year.

The Government puts the country's minimum needs at 5.5m tonnes.

© **AT LEAST 20** people died in recent floods and heavy rains in Thailand. More than 1m acres of farmland and 30,000 acres of fish farms were damaged.

### Sugar prices drop sharply

By John Edwards

**SUGAR** PRICES dropped sharply on the London terminal market yesterday. The London daily price for raw sugar was cut by £10 to £145 a tonne compared with £150 a tonne ago.

On the futures market the March position fell by over £3 to £192.50 a tonne.

Traders said the decline was mainly technical, with speculative selling by computer funds in particular bringing a sharp fall in the New York market.

There was no fundamental supply-demand development to account for the decline. The contract in Grenada was virtually ignored.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

The reduced maize carryover for 1983 will be felt next year. The department had already predicted a "dangerously low carryover" of 819m bushels next summer. Its supply and demand report due out late today is expected to drop that figure by almost 300m bushels.

## CURRENCIES, MONEY and CAPITAL MARKETS

## FOREIGN EXCHANGES

## Little change apart from a firm yen

The dollar and sterling finished little changed after a week start in very quiet foreign exchange trading. The early downward move was more an adjustment after Monday's sharp rise, a reaction to any new factor, or expectation of unchanged Federal Reserve money supply policy after Friday's sharp rise in M1 money supply dashed hopes of easier interest rates, and events in the Middle East continued to underpin the dollar, while the rise of ½ per cent in the U.S. Consumer Price Index came as no surprise and had no impact.

Sterling was on the sidelines, moving with the dollar, but the Japanese yen was firm following a statement by the Governor of the Bank of Japan on his determination to defend the yen through higher money market rates if necessary.

**DOLLAR** — Trade-weighted index (Bank of England) 126.0 against 122.0 six months ago. The dollar has retreated from the peak taken in July amid hopes that a sustained fall was imminent, following better money supply figures, and a slight easing of interest rates. A large U.S. budget deficit is likely to restrain the fall in interest rates and the dollar, but the dollar's recent gains on the currency will continue due to the substantial trade deficit.

The dollar rose to DM 2.8075 from DM 2.8065 against the

D-mark and was unchanged at DM 7.1550 against the French franc; but fell to SwFr 2.1160 from SwFr 2.1175 in terms of the Swiss franc; and to ¥232.50 from ¥233.25 against the yen.

**STERLING** — Trading range against the dollar in 1983 is £1.435 to £1.4540. September average 1.4450. Trade-weighted index 83.5 against 82.4 six months ago. In the morning, £1.4540 was at the same level of \$1.4585 at 8:49am, a fall of 5 points on the dollar. The pound has moved at DM 3.31, but eased slightly to DM 3.301 from FFr 11.9225 from FFr 11.9240. SwFr 3.1750 from FFr 3.1775; and ¥248.7 from ¥250.

**D-MARK** — Trading range against the dollar in 1983 is DM 2.7315 to 2.7320. September average 2.7363. Trade-weighted index 83.5 against 82.4 six months ago. The D-mark has improved after falling to its lowest level for nearly 18 years against the dollar in August. As U.S. money supply figures have improved attention has switched towards German money supply growth, which is causing some concern, and encouraging the Bundesbank to hold interest rates firm. This, coupled with the strong German economy, is likely to support the D-mark.

**FRENCH FRANC** — Trading range against the dollar in 1983 is 8.22 to 8.2688. Trade-weighted index 83.0571. Trade-weighted index 83.5 against 82.4 six months ago. The French franc is currently placed within the EMS, and has received a boost from improving balance of payments figures, and the first trade surplus in September for more than four years. This should help building up for an EMS realignment and has allowed an easing of Euro-franc interest rates.

**YEN** — The franc was firm against the dollar, but the Japanese yen was firm following a statement by the Governor of the Bank of Japan on his determination to defend the yen through higher money market rates if necessary.

**OTHER CURRENCIES**

Argentina Peso... 22.55/22.68 16,000-19,110 Austria 27.30/27.60 Australia Dollar... 1,630.00-1,639.00 1,607.5-1,608.00 Brazil Real... 1,180.1-1,204.5 759.0-803.00 Chile Peso... 1,100.00-1,110.00 1,080.0-1,090.00 Greek Drachma... 139.75/140.35 93.30-93.50 Hong Kong Dollar... 11.65-11.70 7.80 Italy 2,365.0-2,365.5 Luxembourg Fr... 79.65/79.75 63.15-63.40 Norway 10,95-11.05 Portugal 188.819 Spain 1,212.0-1,212.5 Sweden 11.01-11.11 Switzerland 5.12-5.15 United States... 1,012.0-1,012.5 U.A.E. Dirham... 5,5040/5,6000 3,5790-3,5750 1,53-1,53

\* Selling rates.

## THE POUND SPOT AND FORWARD

**Day's spread** Oct. 25 **Closes** One month % 0-4% Three months % 0-4% **Oct. 25** **Day's spread** Closes One month % 0-4% Three months % 0-4% **Oct. 25** **Day's spread** Closes One month % 0-4% Three months % 0-4% **Oct. 25** **Day's spread** Closes One month % 0-4% Three months % 0-4%

U.S. 1,497.6-1,5010 1,4986-1,4985 0.03-0.08 dio -0.44 0.16-0.21 dio -0.49 Canada 1,490.0-1,4900 1,4904-1,4905 0.05-0.06 dio -0.45 0.16-0.20 dio -0.49 United Kingdom 1,27-1,2750 1,274-1,2750 0.34-0.35 dio -0.35 1,27-1,2750 1,274-1,2750 0.34-0.35 dio -0.35 Denmark 14,05-14,12 14,11-14,12 0.25 0.85-1.00 dio -1.25 14,05-14,12 14,11-14,12 0.25 0.85-1.00 dio -1.25 Ireland 1,2550-1,2620 1,2570-1,2620 0.30-0.40 dio -1.34 1,2510-1,2560 1,2540-1,2560 0.30-0.40 dio -1.34 Portugal 185.25-187.00 186.00-186.50 0.05-0.06 dio -20.78 693.0-695.00 693.0-695.00 0.05-0.06 dio -27.47 Spain 225.80-227.50 227.00-227.50 186.300c/dio -12.61 780.0-785.00 780.0-785.00 14.57 Italy 2,372.0-2,378.0 2,374.0-2,378.0 15.70-17.00 dio -6.21 49.0-49.50 49.0-49.50 0.05-0.06 dio -1.00 Norway 10,20-11,10 10,20-11,10 0.05-0.06 dio -0.60 1,00-1,00 1,00-1,00 0.05-0.06 dio -0.60 France 11,85-11,93 11,91-11,93 0.24-0.25 dio -2.27 10.0-12.00 10.0-12.00 0.05-0.06 dio -3.27 Sweden 11,64-11,67 11,65-11,66 0.20-0.22 dio -3.01 7.60-7.70 7.60-7.70 0.05-0.06 dio -2.72 Japan 347-350 348-349.50 0.05-0.07 pm 2.92 2.45-2.55 pm 2.89 Austria 3,37-3,38 3,37-3,38 0.05-0.06 dio -1.00 1,00-1,00 1,00-1,00 0.05-0.06 dio -1.00 Switzerland 3,17-3,18 3,17-3,18 0.10-0.11 pm 5.20 4.3-4.3 pm 4.72 Belgium rate for convertible francs. Financial franc 80.50-80.80. Six-month forward dollar 0.27-0.32 dio -12 months 80.50-80.80. \* Oct 24—The rate should have read 27.40-27.55 (spread); 27.40-27.53 (dios).

## EXCHANGE CROSS RATES

Oct. 25	Pound Sterling	U.S. Dollar	Deutsche Mark	Japanese Yen	French Franc	Swiss Franc	Dutch Guild	Italian Lira	Canadian Dollar	Belgian Franc																
Day's spread	Closes	One month	% 0-4%	Three months	% 0-4%	Oct. 25	Day's spread	Closes	One month	% 0-4%	Three months	% 0-4%	Oct. 25	Day's spread	Closes	One month	% 0-4%	Three months	% 0-4%	Oct. 25	Day's spread	Closes	One month	% 0-4%	Three months	% 0-4%
U.S. 1,497.6-1,5010 1,4986-1,4985 0.03-0.08 dio -0.44 0.16-0.21 dio -0.49 Canada 1,490.0-1,4900 1,4904-1,4905 0.05-0.06 dio -0.45 0.16-0.20 dio -0.49 United Kingdom 1,27-1,2750 1,274-1,2750 0.34-0.35 dio -0.35 1,27-1,2750 1,274-1,2750 0.34-0.35 dio -0.35 Denmark 14,05-14,12 14,11-14,12 0.25 0.85-1.00 dio -1.25 14,05-14,12 14,11-14,12 0.25 0.85-1.00 dio -1.25 Ireland 1,2550-1,2620 1,2570-1,2620 0.30-0.40 dio -1.34 1,2510-1,2560 1,2540-1,2560 0.30-0.40 dio -1.34 Portugal 185.25-187.00 186.00-186.50 0.05-0.06 dio -20.78 693.0-695.00 693.0-695.00 0.05-0.06 dio -27.47 Spain 225.80-227.50 227.00-227.50 186.300c/dio -12.61 780.0-785.00 780.0-785.00 14.57 Italy 2,372.0-2,378.0 2,374.0-2,378.0 15.70-17.00 dio -6.21 49.0-49.50 49.0-49.50 0.05-0.06 dio -1.00 Norway 10,20-11,10 10,20-11,10 0.05-0.06 dio -0.60 1,00-1,00 1,00-1,00 0.05-0.06 dio -0.60 France 11,85-11,93 11,91-11,93 0.24-0.25 dio -2.27 10.0-12.00 10.0-12.00 0.05-0.06 dio -3.27 Sweden 11,64-11,67 11,65-11,66 0.20-0.22 dio -3.01 7.60-7.70 7.60-7.70 0.05-0.06 dio -2.72 Japan 347-350 348-349.50 0.05-0.07 pm 2.92 2.45-2.55 pm 2.89 Austria 3,37-3,38 3,37-3,38 0.05-0.06 dio -1.00 1,00-1,00 1,00-1,00 0.05-0.06 dio -1.00 Switzerland 3,17-3,18 3,17-3,18 0.10-0.11 pm 5.20 4.3-4.3 pm 4.72 Belgian rate for convertible francs. Financial franc 80.50-80.80. Six-month forward dollar 0.27-0.32 dio -12 months 80.50-80.80. * Oct 24—The rate should have read 27.40-27.55 (spread); 27.40-27.53 (dios).																										

## MONEY MARKETS

## All quiet on most fronts

UK clearing bank base lending rate 9 per cent (since October 4 and 5)

Domestic money markets remained very quiet in London, New York, and most Continental centres, except from Frankfurt where large amounts of liquidity were drained for the second day running.

London interbank interest rates were virtually unchanged throughout the day in very dull trading while in New York volume was again in the region of a record low, but may pick up today when the U.S. Treasury refunding programme is announced. Federal funds opened at 9½ per cent and ended the Federal Reserve rolled over Monday's injection of funds by supplying another \$2.5bn of repurchase agreements for customer account.

The Bank of England forecast a money market shortage of £250m, but later revised this to £300m.

A fall in the note circulation did not result in liquidity, but was outweighed by bills maturing in official hands, repayment of late assistance, and a take-up of Treasury bills from Friday's tender amounting to £36m, plus £80m of other transactions of £80m.

Total help provided by the

authorities was £304m. Before lunch the Bank of England bought £156m bills by way of £27m bank bills in band 2 (15-33 days maturity) at 9 per cent; £3m Treasury bills in band 3 (34-63 days) at 9½ per cent; and £2m bank bills in band 4 (64-91 days) at 9½ per cent.

In the afternoon £105m bills were purchased when the authorities bought £30m bank bills in band 2 at 9 per cent;

£3m Treasury bills in band 3 at 9½ per cent; £2m bank bills in band 4 at 9½ per cent; and £1m bank bills in band 5 at 9½ per cent.

Another £45m was provided by way of late assistance.

In Frankfurt call money was offered at 5.55 per cent compared with 5.50 per cent as between DM 3bn and DM 4bn.

Treasury bills continued to drain from the money market through expiring currency swaps.

In the afternoon £105m bills were purchased when the authorities bought £30m bank bills in band 2 at 9 per cent;

£3m Treasury bills in band 3 at 9½ per cent; £2m bank bills in band 4 at 9½ per cent; and £1m bank bills in band 5 at 9½ per cent.

Another £45m was provided by way of late assistance.

In Frankfurt call money was offered at 5.55 per cent compared with 5.50 per cent as between DM 3bn and DM 4bn.

Treasury bills continued to drain from the money market through expiring currency swaps.

In the afternoon £105m bills were purchased when the authorities bought £30m bank bills in band 2 at 9 per cent;

£3m Treasury bills in band 3 at 9½ per cent; £2m bank bills in band 4 at 9½ per cent; and £1m bank bills in band 5 at 9½ per cent.

Another £45m was provided by way of late assistance.

In Frankfurt call money was offered at 5.55 per cent compared with 5.50 per cent as between DM 3bn and DM 4bn.

Treasury bills continued to drain from the money market through expiring currency swaps.

## INTEREST RATES

## EURO-CURRENCY INTEREST RATES

(Market closing rates)

Oct. 25 Short term 7 days notice Month Three months One year

U.S. 1.499 2.606 3.912 5.912 9.912 14.912 24.912 34.912

Can. Dollar 1.499 2.606 3.912 5.912 9.912 14.912 24.912 34.912

D. Guilder 5.1-51 5.1-51 5.1-51 5.1-51 5.1-51 5.1-51 5.1-51 5.1-51

French Franc 1.17-1.18 1.18-1.19 1.19-1.20 1.20-1.21 1.21-1.22 1.22-1.23 1.23-1.24 1.24-1.25

Deutschmark 1.17-1.18 1.18-1.19 1.19-1.20 1.20-1.21 1.21-1.22 1.22-1.23 1.23-1.24 1.24-1.25

French Franc 1.17-1.18 1.18-1.19 1.19-1.20 1.20-1.21 1.21-1.22 1.22-1.23 1.23-1.24 1.24-1.25

Deutschmark 1.17-1.18 1.18-1.19 1.19-1.20 1.20-1.21 1.21-1.22 1.22-1.23 1.23-1.24 1.24-1.25

Italian Lira 1.54-1.55 1.55-1.56 1.56-1.57 1.57-1.58 1.58-1.59 1.59-1.60 1.60-1.61 1.61-1.62

Deutschmark 1.54-1.55 1.55-1.56 1.56-1.57 1.57-1.58 1.58-1.59 1.59-1.60 1.60-1.61 1.61-1.62

Italian Lira 1.54-1.55 1.55-1.56 1.56-1.57 1.57-1.58 1.58-1.59 1.59-1.60 1.60-1.61 1.61-1.62

Deutschmark 1.54-1.55 1.55-1.56 1.56-1.57 1.57-1.58 1.58-1.59 1.59-1.60 1.60-1.61 1.61-1.62

Asian 5 (Sing.) 9.3-9.5 9.3-9.5 9.3-9.5 9.3-9.5 9.3-9.5 9.3-9.5 9.3-9.5 9.3-9.5



## SECTION IV

## FINANCIAL TIMES SURVEY

# Selby Coal Field

This huge £1bn superpit, designed to feed 10m tonnes of coal a year to three power stations, will enable the NCB to produce coal with great efficiency and compete strongly with other forms of energy

By NICK GARNETT

**THE FIRST** production coal emerged this summer from the world's most modern mining scheme, which will develop eventually into the largest in Western Europe.

By the time the 110 square mile Selby field in rural North Yorkshire reaches peak production in 1987-88, just 4,000 men will be producing 10m tonnes of coal a year—a twelfth of the National Coal Board's total current output.

The Selby development, one drift mine and five satellite mines, will extract half of the 600m tonnes in the Barnsley Seam, at a cost of more than £1bn at 1982 prices.

It is by far the most expensive investment ever undertaken by the Coal Board and has meant overcoming some of the most awkward geological conditions ever tackled by mining engineers in the UK.

The difficulties that these conditions pose was shown in July, within four weeks of starting production at the Wistow mine, water under con-

siderable pressure burst into the A1 face at the rate of up to 2,500 gallons a minute. Either coal extraction had disturbed the plane of the fault that triggered the leak, or there or the speed of the face advance had caused the rock to behave in an unpredictable manner.

That crisis halted production for more than six weeks. It demanded a huge effort under the direction of Mr Trevor Massey, deputy area director in direct charge of Selby, to restart work at the face, and adapt it to cope with water which is still pouring into the seam.

The Selby scheme is a centrepiece in the Coal Board's struggle to get a grip on its massive cost problems. It is a battle that Mr Ian Macgregor, the board's new chairman, will now pursue more vigorously.

Selby reflects a number of themes:

- It represents a leap forward for Britain's coal industry and a shift in its development. Selby might be the precursor of a series of super pits as the board accelerates the shutdown of heavy loss-making capacity.

With the Coal Board register-

ing a loss last year of £475m,

before grants, the industry sees Selby as the first complete demonstration of its ability to produce coal at a very high rate of productivity and at low cost in its fight to compete with other energy sources. Selby's output per manshift is expected to be up to five times greater than the current national average.

• The Selby scheme is also a shop window for Britain's advanced technology in coal-field development and mining. From the task of sinking shafts and driving tunnels in difficult geological conditions to the extensive use of micro-computers and the most advanced mining and coal handling equipment, Selby is the most comprehensive collection of the best mine technology anywhere in the world.

#### Marketing

Construction and engineering companies from the UK and elsewhere will utilise it as a marketing plank on which to advertise their expertise. The Coal Board, too, will use the scheme to promote its already well-regarded consultancy work

The 160-acre Gascoline Wood site, where the field's entire output will be brought to the surface. In the foreground are the two drive houses for the conveyors, containing 12,000 hp electric motors and, background, the 300m-long covered stockyard.

at the most productive pits like Selby in any confrontation with management over the pace of closure of the least productive ones.

Selby, whose coal will go principally to the nearby Drax, Ferrybridge and Eggarborough power stations, is part of the £4bn investment programme run by the board since 1974. The assumption of a required increase in capacity on which that programme was based has proved to be too optimistic however.

Total UK coal stocks now represent more than 40 per cent of the Coal Board's annual output of 115m tonnes. The Board's own stocks stand at 24m tonnes with 26m held by the Central Electricity Generating Board and manufacturing industries.

Mr Norman Slidders, the previous NCB chairman, said in the spring that he expected sales this year to drop by 4m tonnes, equivalent to the output of eight medium-sized pits. The Coal

Board has also been forced recently into a price structure compromise with the CEGB which increases cost pressures on the coal industry.

One response to all this has been an accelerating programme of pit closures with the Board on target to shut at least 16 pits this year. On the other side of the fence will be a push for new markets and projects such as

Selby, whose coal will go principally to the nearby Drax, Ferrybridge and Eggarborough power stations, is part of the £4bn investment programme run by the board since 1974. The assumption of a required increase in capacity on which that programme was based has proved to be too optimistic however.

Total UK coal stocks now represent more than 40 per cent of the Coal Board's annual output of 115m tonnes. The Board's own stocks stand at 24m tonnes with 26m held by the Central Electricity Generating Board and manufacturing industries.

At Selby itself, coal output per shift for every man employed underground and on the surface is expected to be 12.7 tonnes as against about 2.3 tonnes for the UK national average. Production costs will run at about £18 a tonne with only 20 per cent of that deriving from labour costs as against 50 per cent in a typical pit. Net profits will be about £17 a tonne, more than three times better

than the best at the moment— and it has demanded extensive management skills to develop their activities. Companies involved in the project make up a distinguished roll call—in construction, names such as French Kier, McAlpine and Dowsett, and in the shaft sinking and tunnel driving Thyssen GB and Cementation Mining, Anderson Strathclyde and Cable Belts supplied the conveyor systems, Davy McKee, Parsons, Cleveland Bridge, GEC, and Hawker Siddeley among others providing equipment and skills.

The existence of the Selby field was missed by coal explorers in the early part of this century; it was in the 1960s that the presence of a rich new coalfield was established. Surveys revealed four good seams containing 2,000m tonnes of coal, all at workable depths. Planning permission work the Barnsley Seam—with half its coal to be left underground to support the land surface—was obtained in 1976 and work began that year.

The depth of the Barnsley Seam varies from 250 metres in the west to 1,100 metres in the north-east of the field, which in geographic area is as big as the Isle of Wight. The seam's thickness varies from 2 to 3.3 metres on the fields so far. Some strains on labour relations have emerged as managers and NUM representatives flex their muscles and people get used to operating in a new environment. Development work earlier this year was temporarily hampered by overtime bans related to the setting up of the first production targets and the operation of procedures.

Such difficulties are probably inevitable and certainly happened at Kellingley in the 1960s. The "settling down" time for new mines is often five or six years, but Mr Eaton says: "I'm confident that this will be shorter at Selby."

For North Yorkshire, the project means a stimulus to the local economy, some new jobs—from canteen staff to mining trainees—and the long-term need to cater for the employment of miners' dependents. For the Coal Board it is an opportunity to show that coal can still be a competitive fuel.



## CONTENTS

Sinking the shafts II
Mining techniques II
Coal handling III
Coal industry IV
Profile: Arthur Scargill IV
The energy balance V
Management VI
Computer controls VI
Care of environment VII
The architecture VII
Local impact VIII
Profile: Trevor Massey VIII
Profile: Derek Ellis VIII

than the best at the moment— and it has demanded extensive management skills to develop their activities. Companies involved in the project make up a distinguished roll call—in construction, names such as French Kier, McAlpine and Dowsett, and in the shaft sinking and tunnel driving Thyssen GB and Cementation Mining, Anderson Strathclyde and Cable Belts supplied the conveyor systems, Davy McKee, Parsons, Cleveland Bridge, GEC, and Hawker Siddeley among others providing equipment and skills.

The existence of the Selby field was missed by coal explorers in the early part of this century; it was in the 1960s that the presence of a rich new coalfield was established. Surveys revealed four good seams containing 2,000m tonnes of coal, all at workable depths. Planning permission work the Barnsley Seam—with half its coal to be left underground to support the land surface—was obtained in 1976 and work began that year.

The depth of the Barnsley Seam varies from 250 metres in the west to 1,100 metres in the north-east of the field, which in geographic area is as big as the Isle of Wight. The seam's thickness varies from 2 to 3.3 metres on the fields so far. Some strains on labour relations have emerged as managers and NUM representatives flex their muscles and people get used to operating in a new environment. Development work earlier this year was temporarily hampered by overtime bans related to the setting up of the first production targets and the operation of procedures.

Such difficulties are probably inevitable and certainly happened at Kellingley in the 1960s. The "settling down" time for new mines is often five or six years, but Mr Eaton says: "I'm confident that this will be shorter at Selby."

For North Yorkshire, the project means a stimulus to the local economy, some new jobs—from canteen staff to mining trainees—and the long-term need to cater for the employment of miners' dependents. For the Coal Board it is an opportunity to show that coal can still be a competitive fuel.

"It's got to be coal if you wish to remain competitive in both national and international markets."

Herman Scopes, Director, ICI Petrochemicals and Plastics Division.

"Coal is an efficient and economic solution to rising energy costs."

Jim Bisset, Director, The Whitecroft Group.

"Coal-fired fluidised bed combustion provides a simple and cost saving solution to heavy fuel oil prices."

John Denton, Works Director, The Ketton Portland Cement Co. Ltd.

"Coal is uncomplicated, it is easy to burn."

Mike Gray, Group Energy Engineer, Dunlop Limited.

# OIL OR COAL? TALK TO THE CONVERTED.

In any discussion on the choice of fuel there's one fact that emerges head and shoulders above the rest.

Coal is a considerably cheaper fuel than either oil or gas.

#### THE CHANGING FACE OF COAL

There have been some impressive advances in boiler technology, combustion techniques and methods of coal and ash handling.

It's now possible to operate in excess of 80% thermal efficiency. Equally surprising is that in modern installations coal and ash are seldom seen and rarely touched by hand.

#### COAL. OUR ENERGY LIFELINE

British Industry needs a modern, reliable and economical fuel to replace those that will dwindle in supply.

Coal is that energy lifeline.

We are fortunate enough in Britain to have the resources to supply industry with coal for the next 300 years.

#### THE 25% GOVERNMENT GRANT SCHEME NOW EXTENDED TO 31st DECEMBER 1983

This scheme can provide up to 25% of the total project cost of making the change to coal.

All companies in the private manufacturing and most service industries are eligible, providing that oil and/or gas has been used to meet at least 75% of the process steam or heating requirements over the previous year.

#### HELP FROM ALL QUARTERS

Further beneficial funding is now available through the EEC. This includes preferential loans at interest rates approximately 3% below the

broad commercial rate and a further 3% rebate on interest charges over the first five years of the loan. And the NCB is willing to enter into favourable medium and long-term supply arrangements with individual customers.

In addition there is a nationwide network of coal distributors who are strategically situated to give advice and provide an efficient delivery service to industry.

It is within the power of coal to make British Industry more efficient, more cost-effective, more competitive in world markets.

For further information on the grant and loan schemes please write to one of the addresses in the coupon on the right.

Funds are limited so an early application is advisable.

Department of Industry, Charles House, 375 Kensington High Street, London W14 8QH (or any regional DIO office).

Or National Coal Board, Technical Service, Marketing Department, Hobart House, Grosvenor Place, London SW1X 7AE.

Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

FT26/10/83B

**NCB**  
Coal. The fuel with a future.

## SELBY COAL FIELD II

**FORAKY**  **LIMITED**

One of the World's leading Exploration and Ground Freezing Organisations and responsible for all Ground Freezing operations at the Wistow, Riccall, North Selby, Stillingfleet and Whitemoor New Mines, also the Gascoigne Wood Drifts.

A comprehensive service of Exploration Drilling for Coal, Gas, Oil and other minerals to any depth worldwide. Over 40 Rigs available.

**Foraky Limited**

Colwick Industrial Estate, Nottingham, England. Telephone (0602) 611300. Telex 377743.

# Huge task to drive tunnels and shafts

THE SPEED at which the shafts at Selby have been sunk and the tunnels driven and the success of contractors in overcoming some very difficult geological problems, have been one of the major achievements of the whole coalfield project. This is not to say there have been no headaches—and one crisis—during an operation which employed 1,500 workers at its peak.

Though the technology involved has been long developed, the prospect of sinking 8,000 metres of shafts and eventually two nine-mile (15 Km) tunnels must have appeared daunting for an industry which has not done much shaft sinking for a long time.

So far, about 7,000 metres of shaft have been sunk with four of the five pairs of vertical shafts at the separate mines virtually finished. Some 5,800 metres of the North Drift tunnel have been completed and more than 6,500 metres of the South Drift. Eight of the ten insets which link shafts direct to the Barnsley Seam to handle equipment and ventilation have also been finished.

Dealing with the area's awkward geology has been the trickiest hurdle for the two main contractors, Thyssen UK and Cementation Mining. Much of the strata through which the Selby tunnels and shafts pass contain huge amounts of water, often under great pressure. There are also some basal sands which complicate matters

further by being almost "running" sands with no solidity.

Taking the shafts first, the technique adopted to overcome the problem of water was to literally freeze the ground, creating an ice wall to exclude the vast volumes of water in the high local water table. This freezing process has been handled on a scale and at a depth never attempted before.

A collar of vertical boreholes are drilled around the perimeter of the 24-ft diameter shafts. Each hole is lined with steel tubing in which is a second, plastic tube.

A freezing plant on the surface then pumps brine cooled to between -20 deg. C and -30 deg. C down through the tubes, forming a solid plug of ice some 30 feet in diameter at the depth at which the water-bearing strata is located. The freezing process can take three months with a similar period for unfreezing.

As the shafts advance downwards they have been lined with concrete up to 1.3m thick, possibly the strongest hydrostatic lining used anywhere in the world.

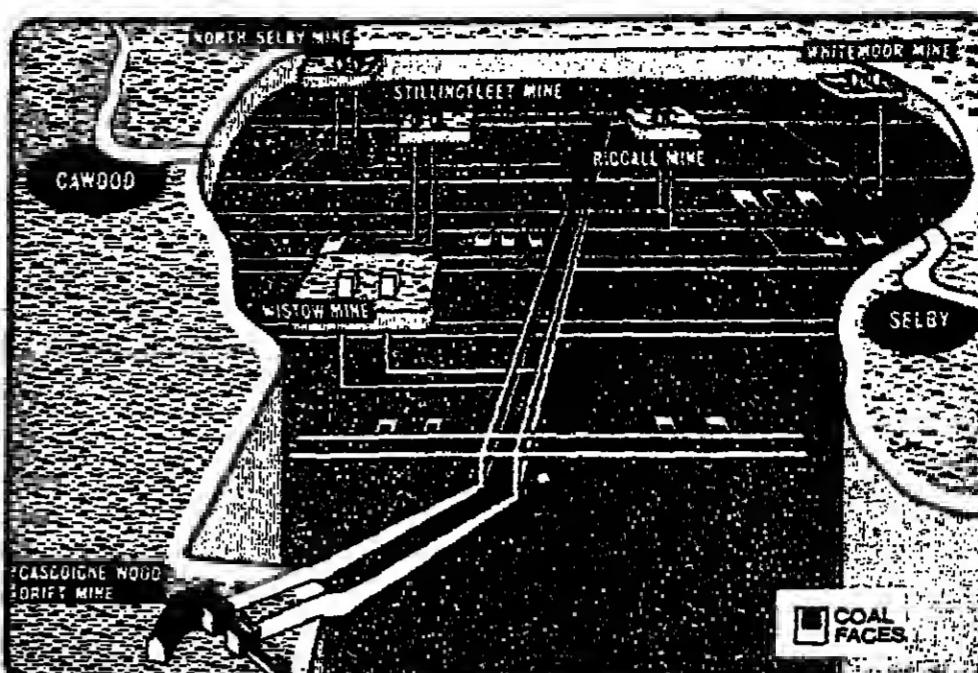
Until the ground is frozen the shafts cannot be sunk, but once done there is a critical time period for stabilising the shaft with concrete before the unfreezing process begins.

This was missed at the Wistow mine creating the project's only real crisis before it was sufficiently hard for water to be pumped out of the shaft.

The incident delayed development at Wistow by six months.

Another big headache occurred at the North Selby mine, which has a sandstone bed within the coal measures themselves. Contractors were surprised to find water at 500 ft per sq m pressure. The mine is at a depth of 1,044 metres—too deep for freezing but the sandstone is not strong enough to withstand the pressure needed for injecting cement.

Meanwhile, work has been



year's Wistow flooding. In June 1978, the Number One shaft at Wistow flooded while the ground was being thawed. The problems presented a major engineering challenge and were overcome by firing armour-piercing bullets into the freezing tubes. Some 4,000 tonnes of cement grout was injected through the holes and into the strata until it was sufficiently hard for water to be pumped out of the shaft.

The incident delayed development at Wistow by six months.

Another big headache occurred at the North Selby mine, which has a sandstone bed within the coal measures themselves. Contractors were surprised to find water at 500 ft per sq m pressure. The mine is at a depth of 1,044 metres—too deep for freezing but the sandstone is not strong enough to withstand the pressure needed for injecting cement.

Meanwhile, work has been

traveling space on the drift tunnels which surface at Gascoigne Wood. These tunnels pass through water-bearing strata at an angle of 15° to the level off at a depth of 190 metres to become underground spine roads—the principal arteries of the coalfield running diagonally across the field for 15 kms. Along them 70 metres below the Barnsley Seam, the coal is being brought up by conveyor.

With water lying very close to the Plain of York's surface, the drift tunnels were being in an open cut dewatered by a pump. A Ditchie Roadheader, an adapted coal tunnelling machine made by one of the clutch of Hawker Siddeley companies involved with Selby, was operated inside a tunnelling shield. This included equipment for setting in place the tunnels' circular iron lining. Hundreds

of tons of cement grout were pumped behind the cast iron "tubbing" to make the tunnels watertight.

Further down, the problems of artesian water were tackled with a continuous series of two-stage furnaces. Grouting from within the tunnel was carried out for a distance of 30 metres, the holes pumped with cement

once this was set and the water flow under control, the tunnel was then advanced for 12 metres. Grouting on a further 30 metres was done before driving the next 12 metres of tunnel. This operation was repeated more than a dozen times in each of the two drifts.

Driving two tunnels of the length required for Selby has involved the kind of machinery which excites the imagination of children.

The North Drift is being driven by a beefed-up version of a conventional Miller roadway heading machine. In this case it is a 250 hp Titan tunneller manufactured by Thyssen which has maintained an average advance of 46 m a week.

Operations were halted in the South Drift, however, to allow for the installation of a 25m full-face tunnelling machine—a Robbins Miner built by Robbins USA in Seattle.

This machine, which weighs 240 tonnes, was shipped to the UK in kit form. A huge underground chamber 40 metres long and 8.5 metres high was excavated to provide sufficient space for its erection. The machine, steered by a laser beam, delivers 800 hp at the circular cutterhead which has a diameter of 5.8 metres.

The whole face of the machine revolves grinding away at the rock face with 42 roller cutters.

The NCB is fond of describing the size of the Robbins and its trailing support equipment with a railway train. The materials train system which services the heading operations is locomotive-driven and has a 15-tonne payload.

The average advance for the Robbins is 90m a week which is a high-speed effort in tunnelling terms.

The quality of the drift tunnels has pleased the NCB. Mr Trevor Massey, the mining engineer in direct charge of the Selby development, says they are leaking just one gallon of water a minute. "That's dry as far as we are concerned."

## DOSCO & HOLLYBANK at SELBY



DOSCO and HOLLYBANK have supplied tunnelling machines and roadway support systems for use in the development of the SELBY COALFIELD.

Both companies are proud to be associated with this project and wish the National Coal Board continued success.

The equipment quoted in this advertisement has been purchased by the National Coal Board for use in United Kingdom mines or establishments.

**HAWKER SIDDELEY**  
**DOSCO OVERSEAS ENGINEERING LTD**  
**HOLLYBANK ENGINEERING LTD**

OLLERTON ROAD, TUXFORD, NEWARK, NOTTS NG22 0PQ. TEL: Tuxford (0777) 870621

Hawker Siddeley Group supplies electrical and mechanical equipment with world-wide sales and service

## Boosted productivity the target

SELBY'S FIVE MINES, each with four faces, are expected overall to produce coal at about five times the current national productivity average for British mines. The target is an average 12.5 tons of coal for each miner every shift.

This high productivity can be achieved because of four factors. These are the thickness and quality of the Barnsley seam; the use of longwall retreat mining which is naturally productive and allows management to obtain much information about the coal before operations begin; utilisation of the most modern and automated coal-cutting shearer loaders with hydraulic supports; and innovations in material handling linked to the supporting drainage network.

This latter point is a crucial element of Selby's operation because for every metre of coal-face retreat close on three metres of in-seam tunnelling or drivages are needed. "The speed of retreat mining is governed by how good your support drivages are and how you handle materials," says Mr Trevor Massey, the NCB's deputy area director.

The one worrying factor is that no one can guarantee that the flooding which paralysed the A1 face at Wistow for almost two months will not strike elsewhere in the field.

The Barnsley Seam is in bands up to 11 ft thick and the coal is clean with very little if any waste rock mixed with it—ideal for longwall retreat mining.

This form of mining involves the driving of access roads to coal blocks which are up to nearly 2 km in width. The faces are opened at panels of coal 1,000 metres long on each side of the main roadways. The coal cutter then makes its way backwards from the furthest extremity down the line of the access roads.

One advantage of this retreat mining is that the driving of a complete network of access roads prior to production provides mine managers with a clear perspective of the whole mining layout. It also removes the congestion with drivage gangs at the end of coal faces associated with advance longwall mining.

Selby is heavily indebted to the coal board's advanced technology mining concept. This involves the drawing up of an integrated design for all the coalface equipment and its control gear.

The equipment on each face will cost about £5m. The basic machine is the shearer loader—the most modern answer to the pick and shovel. With this comes hydraulic roof supports—replacing the old pit props.

At the A1 coalface at the Wistow mine—the first face in the Selby coalfield—the shearer loader is an Anderson Strathclyde A/S 500 which holds a number of production records around the world. It is a double-ended drum shearer fitted with two 72-inch cutting drums, which have hardened steel picks.

The complete machine with drums revolving and biting into the coal is hauled along the length of the coalface on a track above the face conveyor.

The 400 hp shearer cuts the coal like a bacon slicer removing a 700-millimetre web of coal from the 2.5-metre thick face on each run. Each complete "strip" of the face will

yield 252 tonnes of coal every 25 minutes though the total cycle will take 77 minutes. Estimated average output per face is 2,000 tonnes a day with a productivity of 24 tonnes per manshift worked.

Operations on the face will be carried out by just seven men working in what is in effect a protective cocoon of steel, thanks to major improvements in shield support. Dowty has supplied four 450-tonne heavy-duty shield supports with advanced remotely-operated control equipment.

Each powered support possesses a micro-processor control box with push buttons replacing conventional hydraulic valves for the various chock operations. The operator pushing buttons on a specific chock will be activating a chock at a predetermined distance away so ensuring that he can remain at a safe distance from moving machinery.

Twenty to 30 tons of coal can drop off in front of a face in some mining operations but the coalface equipment at Selby is designed to remove the serious safety problems that can generate. The Coal Board says that, overall, setting

the supports is one of the mining engineers' biggest challenges.

The main task of the shearer loader's driver is to keep the cutting head in the coal, ensuring that it does not deviate into the rock strata above and below the seam.

New technology developed by the NCB's mining research and development establishment and the GEC subsidiary, Salford Electrical Instruments has provided the shearer with a micro-processor. This is a natural

gamma ray monitor sending out a beam which bounces back from the seam to give instructions for the cutting face.

In terms of the coal-cutting operation, the NCB at Selby has taken the latest proven equipment and will be assessing over the next few years just what it can do. The coalfield management though has introduced a new philosophy for designing and operating the supply lines to the face. This

CONTINUED ON NEXT PAGE

Supplying tomorrow's coalfields... today!

**NET**  
Mining Equipment Ltd.

Head Office: Bye St., Sheffield S1 3GP Tel: 0742 79281/751311

BALFOUR & FRANCIS  
Screws and Anchors  
Flameproof motor control gear up to 32kw

DRILLING EQUIPMENT  
Dolies, Buggies, Trolleys and Sheet Transporters  
for mining and tunnelling duties.

MACKLEY PUMPS  
Gated-pit, Multi-stage, pump casting and end suction pumps for mine drainage.

REVERSE GEARS  
Gears, Pinion and Industrial motor control gear up to 6 Nm.

## DON'T BURN MONEY BURN COAL!

**YOU CAN CUT PRODUCTION COSTS BY USING BRITAIN'S CHEAPEST AND MOST ABUNDANT FUEL**

The six Fluidised Bed Boilers Energy Equipment supplied to the Selby Coalfield provide heat for the Wistow and Riccall amenity blocks. They have provided over 10,000 hours of continuous unmanured operation at exceptionally low cost. These are only two of many successful installations.

Energy Equipment can supply a cost cutting, coal burning system for almost any application.

**SO IF YOU SUFFER FROM HIGH ENERGY COSTS—  
CONTACT THE:**

**ENERGY**  
EQUIPMENT CO., LTD.

A MEMBER OF THE PETROFINA GROUP OF COMPANIES

ENERGY HOUSE • HOCKLIFFE STREET • LEIGHTON BUZZARD • BEDS.

TEL: 0525 377600

## First Couzens

Think first of Couzens when considering electrical contracting experience. H.J. Couzens is one of the NCB's major electrical contractors in the N. Yorkshire coalfield.

Experts in mining and heavy industry, Couzens has been involved at all the Selby sites including, for example, the mains distribution at Gascoigne Wood and the Wistow Downcast Wind.

Couzens has been a supplier of electrical contracting services and manpower to the NCB for

over thirty years, working in many areas of mining from amenity blocks right up to the coal face.

It is particularly experienced in coal preparation plants, electrically-operated winders, underground and surface skip and coal handling projects.

Telemetry, lighting, signalling and closed-circuit television are also among its specialised skills.

If you require mining or heavy industry electrical contracting expertise consider Couzens with complete confidence.

A subsidiary of Staveley Industries plc  
Electrical & Mechanical Services Group

H.J. COUZENS LTD

251 Pitmoor Road,  
Sheffield S3 9AR.  
Telephone: 0742 750012  
Telex: 54456



جامعة المنصورة

## SELBY COAL FIELD III

The five pits with their four faces will produce a total 2,000 tonnes a day

## Highly-automated coal handling on a big scale

**IT TAKES** 90 minutes for a piece of coal to reach the power station after being cut from the first productive pit in the Selby coalfield where it has lain for the past 300 years.

The handling of this coal, between the pit faces and the British Rail wagons—is the central feature of the whole Selby project undertaken by the NCB's hope that it will be five times as productive as the mining industry's national average.

When fully developed toward the end of the 1980s, the Selby field, covering an area as big as the Isle of Wight, will be worked from five separate mines. The coal, which is so rich that it does not require washing, will be conveyed along two underground spine roads nine miles long and 70 yards apart. At their western end, they emerge through parallel drift tunnels into the 138-acre stocking and railway marshalling unit site at Gascoigne Wood.

**Simple**

In outline, the Selby concept of bringing all the coal to the surface through drift mines at a single site, was simple enough to have been worked out by Yorkshire Coal Board officials on the proverbial "back of an envelope." In practice, because of the scale of the project, it skirts the edges of new technology.

Many of the technical achievements can be viewed by tracing the route taken by the coal until it reaches the merry-go-round wagons which serve the power stations.

When the project is fully developed, this journey will take far longer than the 90 minutes quoted above. The present estimate applies to the first coal now being produced at Wistow, three miles from Gascoigne Wood.

It takes into account the 40-minute underground ride from the Wistow face to the railway loading bunker, about 15 minutes to load the first trains, and the 35-minute rail journey to Ferrybridge power station.

Currently, too, the coal arriving at Gascoigne Wood is going directly on to the trains. But when production builds up large quantities will be piled in the covered stockyard, which looks over a quiet rural site like the shed of a major main-line railway station.

### Boosted productivity the target

CONTINUED FROM PREVIOUS PAGE

basically involves the concept of packaging materials, increasing the efficiency of material handling so that the men at the face know that they have enough supports and other equipment for at least seven metres of advance.

The solution to this—while grew out of the construction work—was the materials train system using big cars manufactured by GMT and Bechtel to move materials and equipment from the surface stockyards. Such trains have been used in the building work, a 15 tonnes payload taking in more than 20 feet of equipment for heading.

In the coal-getting operation the NCB believed it could use a pit with 15 of these big cars. On this surface the cars will be moved along rail tracks by multi-purpose tractors which can be used for other surface duties. The cars will be rolled into the cages for winding down the mine shafts at the bottom of which they will be marshalled in the pit bottom by battery-driven track locomotives using rubber-tyred wheels.

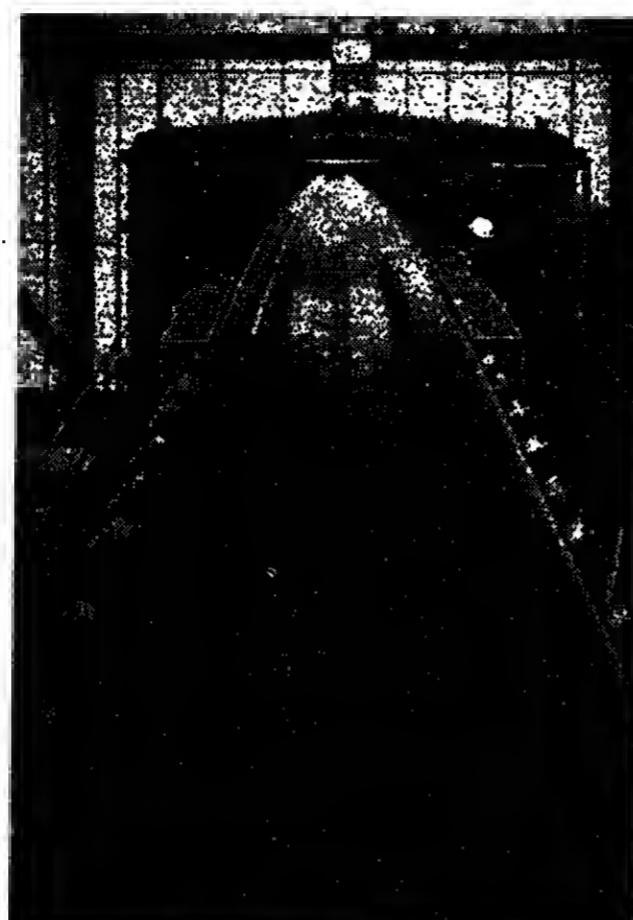
Nick Garnett

- These mini-locomotives will make up in the sidings trains which will then be harnessed to more powerful diesels for transporting in the drivages. Each mine will have its own underground railway system with the diesels using a combination of rack and adhesion traction. Traction is provided by normal track adhesion on level and slightly sloping track-tracks in-seam will incline at an average of 1 in 17 across the coalfields as the seam dips to the north-east.
- For the steeper gradients in the geological fault areas, however, an adaptation of mountain railway engineering comes into play with the use of a toothed-drive wheel on the loco meshing with a rack between the rails.
- At each site, one shaft will be equipped with balanced cages for the winding of men and minecars. The other shaft will have a large cage capable of dealing with the heavier equipment, up to 16 tonnes weight in a single lift.
- French Kier Construction Limited has been active in Britain's coal industry for many years, both as a producer of open cast coal and a constructor of colliery and ancillary buildings. During the last twenty-five years, work has been undertaken in every major coalfield in Britain.
- French Kier Construction Ltd. are the main civil engineering contractors for the surface works at the Gascoigne Wood Mine, Selby. They have constructed the two drive houses, concrete surge bunker, 43,000 tonne coalstore, transfer houses, 10Km railings, site roads and hardstandings, all to a value in excess of £30 million.

French Kier Construction Ltd. have produced more than 2 million tonnes of open cast coal for the National Coal Board. Their sites at Benbain and Keirsbeath in Scotland will continue well into the 1980s and will produce a further 5 million tonnes of opencast coal.

French Kier Construction Ltd. have constructed two 40 cubic yard walking draglines, each weighing 2000 tonnes for the National Coal Board. Precision mechanical, electrical and welding work to a value of £1 million is required for each of these machines.

For further information on the French Kier Group's capability and experience in the production of coal and related activities, please contact C. A. Frettsome, BSc(Eng), C. Eng., MICE, Managing Director, French Kier Construction Limited, Tempstord Hall, Sandy, Beds. SG19 2BD. Telephone: Biggleswade (0767) 40111.



One of the two conveyors running at Gascoigne Wood. The belts will move at 20 mph, three times faster than conveyors in most other mines

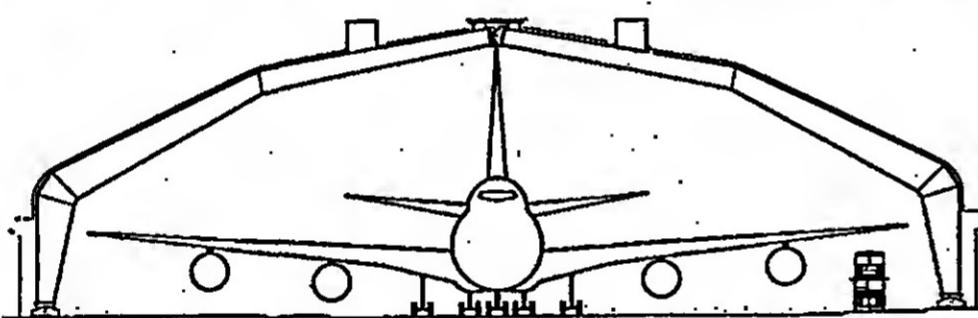


Diagram and view of the enormous covered stockyard at Gascoigne Wood, believed to be the largest, single-span industrial building in Europe—a Jumbo Jet and London bus are shown for comparison. Thirty people will handle stocking and loading of the coalfield's entire output.

teed working life of about five years.

Among its novel features is a method of attaching new lengths of belt by a vulcanising process. This permits the belt to be extended as the more easterly pits are brought into the Selby system. The additional sections, 418 metres long, come on reels weighing 43 tonnes.

The North drift conveyor will run on a different system patented by Cable Belt of Canada. Similar to the South drift, the belt being directly driven by the winder motors, it will be propelled on twin steel cables. The belt will have moulded grips, or shoe forms, which sit on the cables. When loaded it sags to the required depth and has no need of idlers on which to "trough."

The first stage of the South Drift conveyor is nearly ready to operate but work on the North Drift's cable belt is in the early stages with only the foundations of its drive unit at Gascoigne Wood completed.

**Casting**

The drive units for both conveyors, the world's largest in electrical power terms, are being built by GEC Electrical Projects. The two motors on the Southern conveyor are rated at 6,200 kilowatts each. The conveyor's drive roller, which cost £250,000, weighs 120 tonnes and is made by the British Steel Corporation from a single casting.

Another illustration of the scale of the operation is that it is impossible to stop the conveyors dead: it takes 45 seconds to bring them to a halt during which 80 tonnes of coal "surge" to the surface.

When it emerges at Gascoigne Wood, where the conveyor motors are located, the coal is now two thirds of a mile higher than its lowest collection point underneath the coalfield. Its final ascent through the drifts is up a one in four slope.

Gascoigne Wood, covering 158 acres, is highly automated, with a staff of fewer than 30 men to handle the stocking and loading of the coalfield's 10m tonnes a year.

It will be able, in emergency, to hold 260,000 tonnes, although its main buffer stock will be held in the covered stockyard, with capacity for a day's output of 43,000 tonnes.

This huge structure, the biggest single-span industrial building in Europe, is open at one end. It is here that the coal will be stacked and blended by two "barrel" reclaimers, manned by a single operator working in an overhead cabin.

For the next year or so the coal will go straight to the smaller strategic bunker, which regulates the flow to the two road loading hoppers for filling the merry-go-round rail wagons.

Between the strategic bunker and the hoppers the coal is checked for quality by automatic sampling. The strategic bunker and the hoppers, like the stockyard, are all one-man operations.

The wagons will be loaded by "flood filling" techniques as they slowly roll past at between 0.5 and 1.15 miles per hour. Each station will be able to load 960 tonnes of coal into a 30-wagon train in about nine minutes and to handle a train every 17 minutes. Each train will also be automatically weighed before and after loading.

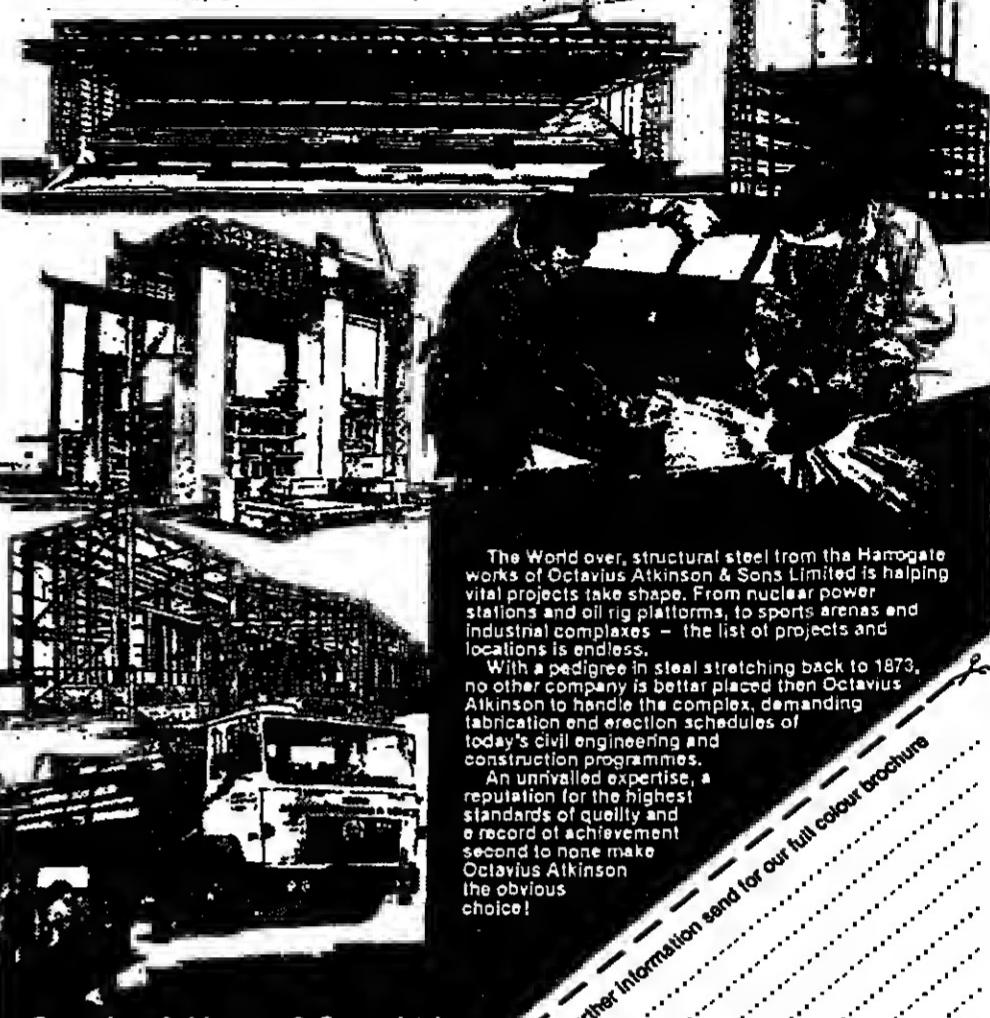
It is now only a short run of about half an hour to the three major coal-burning power stations at Ferrybridge, Eggbrough and Drax, each of which has an annual burn of about 4.5 million tonnes.

The electricity authorities hope that eventually all the Selby coal will be burnt at Drax, whose capacity is being raised from 2,000 to 4,000 Megawatts.

Maurice Samuelson

## DA OCTAVIUS ATKINSON

STRUCTURAL & COLLIERY STEELWORK



The World over structural steel from the Hamgate works of Octavius Atkinson & Sons Limited is helping vital projects take shape. From nuclear power stations and oil rig platforms, to sports arenas and industrial complexes – the list of projects and locations is endless.

With a pedigree in steel stretching back to 1873, no other company is better placed than Octavius Atkinson & Sons Limited to complete demanding fabrication and erection schedules of today's civil engineering and construction programmes.

An unrivalled expertise, a reputation for the highest standards of quality and record achievement seems to make Octavius Atkinson the obvious choice!

For further information send our full colour brochure

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone: \_\_\_\_\_

## Matthew Hall AT SELBY

Matthew Hall Group companies have taken an important role during the construction of the Selby coalfield, being responsible for the lighting power and control cabling installations within the Selby complex, at Wistow,

Whitemoor, Riccall and Stillingfleet mines and at the Gascoigne Wood Drift mine.

Qualter, Hall & Co., Ltd., the Group Company based in Barnsley and specialising in mineshaft technology, is the main contractor at Wistow and Whitemoor sites responsible for the design, supply, erection and commissioning of the Upcast and Downcast mineshaft mechanical handling equipment. It has also supplied minecar handling equipment for Riccall and Stillingfleet mines.

## Matthew Hall Group of Companies

Matthew Hall House,  
101-108 Tottenham Court Road,  
London W1A 1BT.  
Telephone: 01-636 3676

## French Kier builds at Selby

French Kier Construction can tackle any work connected with coal development anywhere.

French Kier Construction Limited has been active in Britain's coal industry for many years, both as a producer of open cast coal and a constructor of colliery and ancillary buildings. During the last twenty-five years, work has been undertaken in every major coalfield in Britain.

French Kier Construction Ltd. are the main civil engineering contractors for the surface works at the Gascoigne Wood Mine, Selby. They have constructed the two drive houses, concrete surge bunker, 43,000 tonne coalstore, transfer houses, 10Km railings, site roads and hardstandings, all to a value in excess of £30 million.

French Kier Construction Ltd. have produced more than 2 million tonnes of open cast coal for the National Coal Board. Their sites at Benbain and Keirsbeath in Scotland will continue well into the 1980s and will produce a further 5 million tonnes of opencast coal.

French Kier Construction Ltd. have constructed two 40 cubic yard walking draglines, each weighing 2000 tonnes for the National Coal Board. Precision mechanical, electrical and welding work to a value of £1 million is required for each of these machines.

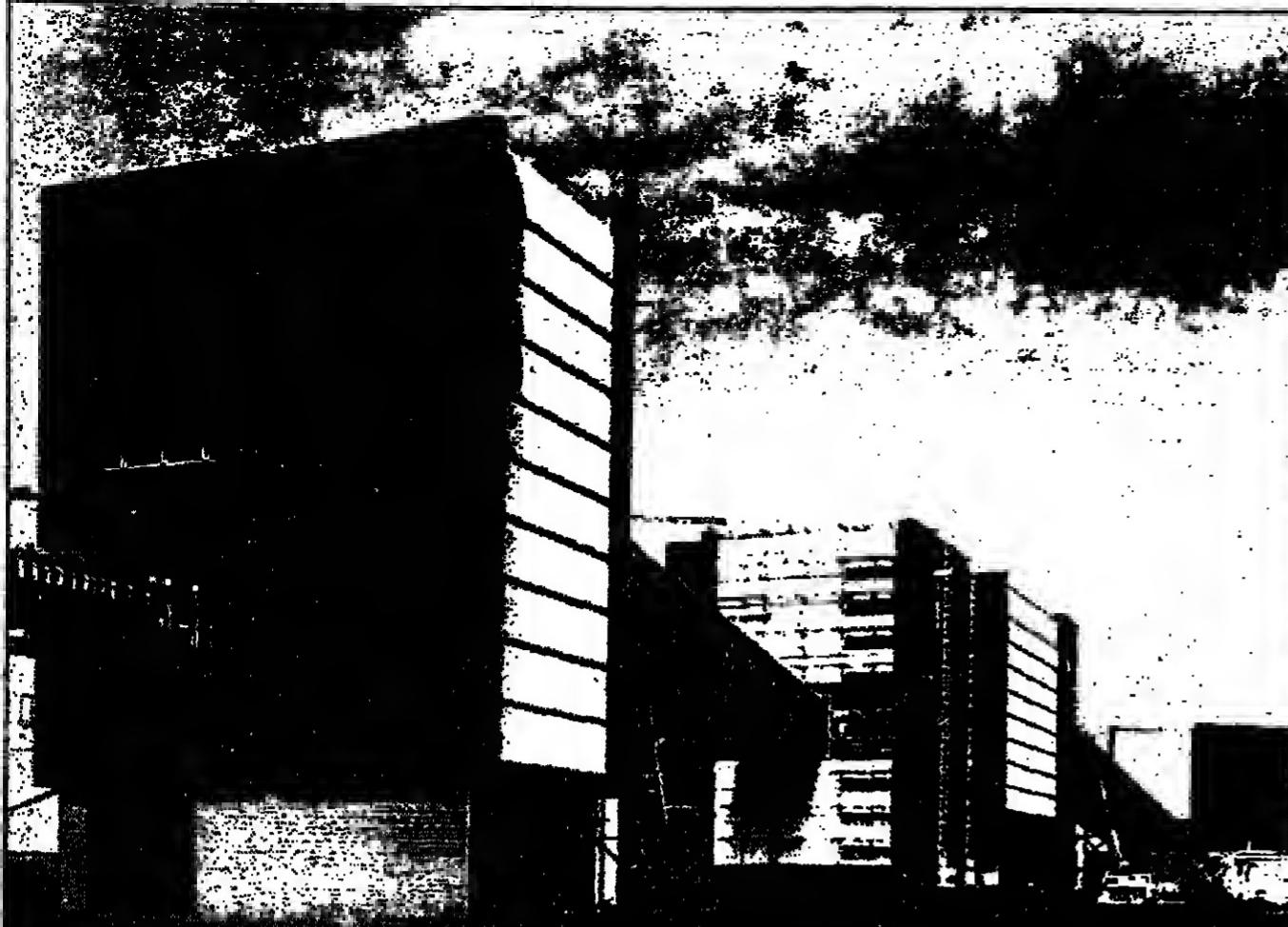
For further information on the French Kier Group's capability and experience in the production of coal and related activities, please contact C. A. Frettsome, BSc(Eng), C. Eng., MICE, Managing Director, French Kier Construction Limited, Tempstord Hall, Sandy, Beds. SG19 2BD. Telephone: Biggleswade (0767) 40111.

300m long, 22m high, 43,000 tonnes coalstore with a single span of 67m, part of the surface works at Gascoigne Wood Mine, Selby.



**FK** FRENCH KIER CONSTRUCTION

## SELBY COAL FIELD IV

Different views on shape  
of the coal industryBulk Materials Handling,  
Stacking and Reclaiming

For the Gascoigne Wood drift site in the North Yorkshire Area of the N.C.B. Adamson Butterley were chosen to design, manufacture and install bulk materials handling systems capable of high speed movement of materials from the drift conveyors to stockpile, bunkerage or rapid loading facility, in phases 1 & 2 of the surface works.

Dual-line conveyors, gantries and housings, together with transfer junction points, have been specially designed/developed to ensure a continuous flow of material and to accommodate the annual production output of 10m tonnes of coal. The entire system incorporates sophisticated computer controlled monitoring, sequencing, data processing, protection circuits, interlocks and alarms, plus some of the largest belts designed for coal movement in the UK.

In addition to the run of mine conveying system Adamson Butterley were also chosen to supply two stacking machines rated at 4,230 tonnes per hour stacking capacity, plus two barrel-type reclaimers of 2,000 tonnes per hour reclaiming rate. The latter machines are being designed in collaboration with Italimpianti.

The service quoted in this advertisement has been used by the National Coal Board in their United Kingdom mines or establishments.

These machines will operate within the covered stockyard at Gascoigne Wood and are designed to provide maximum homogenisation of the coal being produced at Selby.

The Selby scheme is just one of hundreds of projects carried out by Adamson Butterley for the N.C.B. Today's computer-controlled equipment is a result of 200 years development which make us one of the World's most experienced manufacturers of both material handling systems and the highly specialised machinery needed to operate these systems.

Adamson Butterley  
Engineering Limited

Adamson Butterley Engineering Limited  
Ripley, Derby  
Derbyshire  
DE5 3BQ  
Tel (0773) 46111  
Telex 37508

THE ASSUMPTION by Mr Ian MacGregor of the post of chairman of the National Coal Board and his early and continued insistence on market realities, has sharply focused comment on the future of the coal industry.

Mr Arthur Scargill, the President of the National Union of Mineworkers, has described Mr MacGregor as a "butcher." Mr MacGregor has countered by calling himself a "plastic surgeon." Between butchery and cosmetics there lies a wide gulf—but both have as a prime objective the changing of shapes.

However, while the appointment has acted as a focus, the focus is a little misleading. First, the shape of the coal industry has constantly changed, because an extractive industry requires frequent burials and renewals to stay in business.

Second, the shape which Mr MacGregor will back or mould out of the present configuration of pits and plants will be less his own than one whose parameters have been laid down by Sir Norman Stoddart, the current and retiring chairman, by the harsh fact of the contemporary energy market and by the accidents of geology.

The energy market has been depressed for the past three years, but coal has been able to keep that reality at bay, first by enjoying a considerable price advantage over oil, but second and most important, by enjoying a considerable armlock over government, even a government as reputedly market-oriented as the present one.

That armlock enables the coal industry to persuade the Government to stop most imports of cheap coal coming into the country, and it also allows the Board to stockpile some 27m tonnes of its own and persuade the Central Electricity Generating Board to stock almost as much on its power station grounds. Thus the N.C.B. has carried on producing, even though the power stations and the steel mills and the other users have not been burning.

Many have been the cries of "This cannot go on," but there are now signs that indeed it can. Stocks have reached spillover proportions after a mild winter and continued recession, the oil price is falling and international coal prices are below UK coal prices. The market pressures are relentless.

The Coal Board knows this better than anyone, and Sir Norman has told the truth to the miners and everyone else since he took office. A Daniel in the lion's den of Mr Scargill's first conference last July, Sir Norman told the assembled delegates that some 12m tonnes of capacity lost the board £250m a year, and that had to go.

Mr Scargill, picking up this theme, uses it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some 30 pits it wished to close. He added fuel to that fire by producing documents which pointed to some confirmation of this by showing that the Board

had to go.

Mr Scargill was picked up this theme, using it as confirmation that the Board had a "hit list" of some

## SELBY COAL FIELD V

Falling demand is at the heart of the industry's problems  
**Intense rivalry with oil to meet energy needs**

**THE UK COAL** industry is being both pushed and pulled by its mixed fortunes.

At first glance coal suppliers—helped by improved mining productivity—would seem to be doing well, regaining their dominant market share which they enjoyed until 1970 when oil became the country's leading primary fuel.

In 1981 the UK used 6.7 per cent more coal than oil on an energy-equivalent basis. Last year the two fuels were running neck and neck, with each supplying just over one third of the country's energy needs. In the first seven months of this year coal usage was again outstripping oil consumption by 5.5 per cent.

According to recent energy projections by the National Coal Board, the coal industry will maintain this lead. The Board reckons that during the present 1983-84 financial year demand for coal will account for about 110m-111m tonnes of the country's primary energy consumption of 308m-311m tonnes. Demand for oil, on the other hand, is expected to be between the equivalent of 108m and 107m tonnes of coal.

But the coal industry can take very little comfort from its apparent improvement in the fuel league table. For it has occurred largely as a result of the dramatic drop in oil demand—35 per cent since 1973—which in turn has risen through conservation measures, economic recession, and fuel users' flight from oil (often to natural gas).

Coal producers have also been hit by falling demand although, from their point of view, the rot started to set in long before the 1973 energy crisis. UK coal demand hit a peak in 1956 when consumption totalled 217m tonnes. Since then consumption has been on the decline, to a



Miners leaving a Yorkshire colliery at the end of the dayshift. Falling demand and investment in new projects like Selby threaten older mines

little under 200m tonnes in the early 1960s, to 157m tonnes in 1970 and 123m tonnes in 1980.

This long-established decline in demand is at the heart of so many of the industry's difficulties. For not only has the Coal Board had to invest in new, more cost-effective mines like Selby but it has had to shut down a great deal of its old colliery capacity which is clearly no longer needed.

Considerable pruning has already taken place over the

past dozen years. For instance, between March 1971 and spring 1970 and 123m tonnes in 1980.

This long-established decline in demand is at the heart of so many of the industry's difficulties. For not only has the Coal Board had to invest in new, more cost-effective mines like Selby but it has had to shut down a great deal of its old colliery capacity which is clearly no longer needed.

Considerable pruning has already taken place over the

ing coal field to an expanding one." In the past year he has seen employment in the ageing, and largely depleted Leicestershire coalfield fall by over 1,000 to less than 3,000.

Investment in new mines and mining equipment is a major factor behind improving productivity. Another contributor has been the successful introduction of an area bonus scheme to encourage efficiency. The complexion of the workforce is also changing; the average age of miners is dropping rapidly and an increasing proportion of the men are buying their own homes.

As a result of all this 11 output records were broken in the 1982-83 financial year. Output per manshift averaged 10.10 tonnes, a 5.6 per cent increase over the previous year; in March the output was up to 11.2 tonnes. Attendance was better than in any year since nationalisation with the absence percentage throughout the year at 10.4, a full percentage point lower than in 1981-82.

And yet in spite of these encouraging trends the Board remains in deep financial trouble. It could be at least five years before it is back in the black. The industry's overall performance is still being dragged down by a long tail of uneconomic pits with roughly 12 per cent of its output losing £250m annually.

In addition the economic recession has depressed the demand for coal much harder than the Board had forecast, with the result that over 53m tonnes of coal—almost half a year's UK consumption—is now stockpiled.

With this in mind Mr MacGregor insists that "my main job is to find customers for the coal." If he is successful he may break down the barrier that was first erected by Mr Arthur Scargill, NUM president who said, at least initially, that he saw Mr MacGregor more as a "butcher" — out to hack at jobs and loss-making pits—rather than as a salesman.

Ray Dafter

to go as Mr Norman Siddall, the recently retired chairman of the Coal Board, pointed out last month. He said that during the current financial year the rundown in manpower, mainly through natural wastage and voluntary redundancies, was likely to exceed last year's figure of 10,174. Seven collieries were closed in 1982-83 and more than twice as many could be shut in the present 12 months.

Mr Siddall's successor, Mr Ian MacGregor, formerly head of British Steel Corporation, has been urged by the Government to return the industry to profit as soon as possible. (Last year the Board made a loss before grants of more than £475m.) That will mean further pit closures. At least 60 of the Board's 181 pits are expected to reach the end of their workable reserves by 1990-91.

Yet, on the more positive front, the Board is continuing to invest heavily in modern mining capacity while the miners repeatedly register new productivity records.

In the past nine years the Board has invested some £2bn under the Plan for Coal development proposals drawn up in 1974 by the industry, government and trade unions. That plan put the emphasis on the generation of 22m tonnes of new and replacement capacity by the mid-1980s.

Given the uncertain future for coal sales at home and abroad, that plan has been pushed to one side. Its target of an output running at 170m tonnes a year by the end of the century is now seen by industry leaders as fancifully optimistic. But the main thrust of the plan, the movement towards a more modern, profitable industry, continues.

Significantly, the Government has recently cleared the way for the controversial £400m development of a major mining project near the Vale of Belvoir, Leicestershire. This mine, to employ between 1,100 and 1,500 people, formed part of the NCB's proposal to open three pits in and around the Vale, one of the few unspoilt parts of the East Midlands.

The overall project was rejected by Mr Michael Heseltine, a former environment secretary, but then his successor, Mr Tom King, said he would not stop the Board developing one of the pits, Asfordby, near Melton Mowbray.

"We'll do it," said Mr Jack Jones, Leicestershire area secretary of the National Union of Mineworkers. "We have moved from working a contract-

SALES  
Source: National Coal Board

UK PRIMARY ENERGY DEMAND (million tonnes of coal equivalent)						
	1973	1975	1980	1981-82	*1982-83	*1983-84
Coal	133	122	123	117	116	110-111
Oil	164	126	121	113	108	106-107
Natural gas	44	55	70	73	71	71-72
Nuclear	10	11	13	14	17	19
Hydro	2	2	2	2	2	2
Total	253	226	329	319	306	308-311

\*Estimate.

Source: National Coal Board

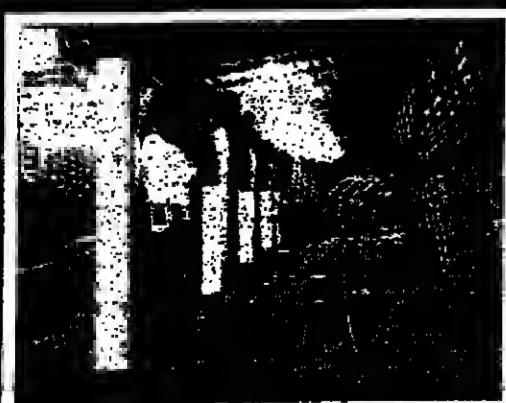
NCB's SALES AND PRODUCTION (in tonnes)			
	1981-82	1982-83	1983-84*
<b>SALES</b>			
Power stations	82.0	86.2	86.9
Coke ovens	8.4	7.6	7.5
Industry	8.7	8.8	9.2
Domestic	8.0	7.3	7.3
Others	2.7	3.6	3.6
Exports	9.4	7.1	7.5
<b>Total</b>	126.2	120.6	116.3
<b>PRODUCTION</b>			
Deep mines	108.9	104.7	106.2
Opencast	14.3	14.7	14.6
Licensed mines	1.1	0.3	1.2
<b>Total</b>	124.3	119.7	121.5

\*Estimate.

For the full story of Cementation Mining's involvement in the development of Selby Coalfield please turn to the Letters Page

Cementation Mining Ltd, Bentley House, P.O. Box 22, Doncaster, South Yorkshire, England.

**SKILLED, EXPERIENCED MINING ENGINEERS**  
Backed by the most modern mechanisation techniques  
**ANYTHING UNDERGROUND ANYWHERE**  
In Shaft Sinking, Tunnel Drilling, Drifting and Developments  
**CONSULTANCY AND DESIGN FOR MINE DEVELOPMENTS**  
Underground and Surface drilling and Grouting Specialists



AMCO

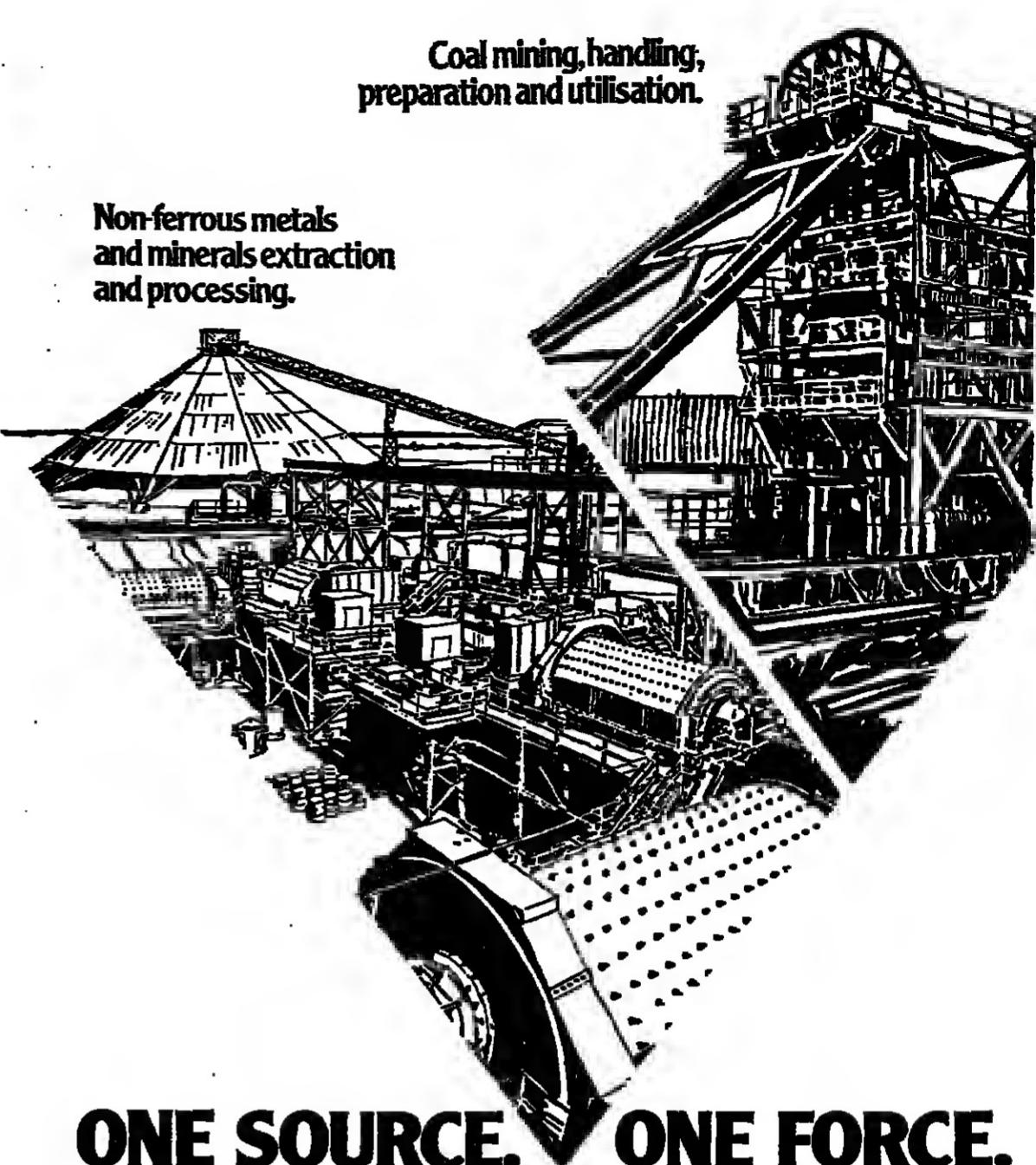
Amalgamated Construction Co. Ltd.

MINING AND CIVIL ENGINEERING CONTRACTORS  
P.O. Box 1, Whaley Road, Barugh, Barnsley, South Yorkshire S75 1HG  
Telephone 0226-43413 (5 lines) Telex 547401

John Lloyd

Coal mining, handling, preparation and utilisation.

Non-ferrous metals and minerals extraction and processing.



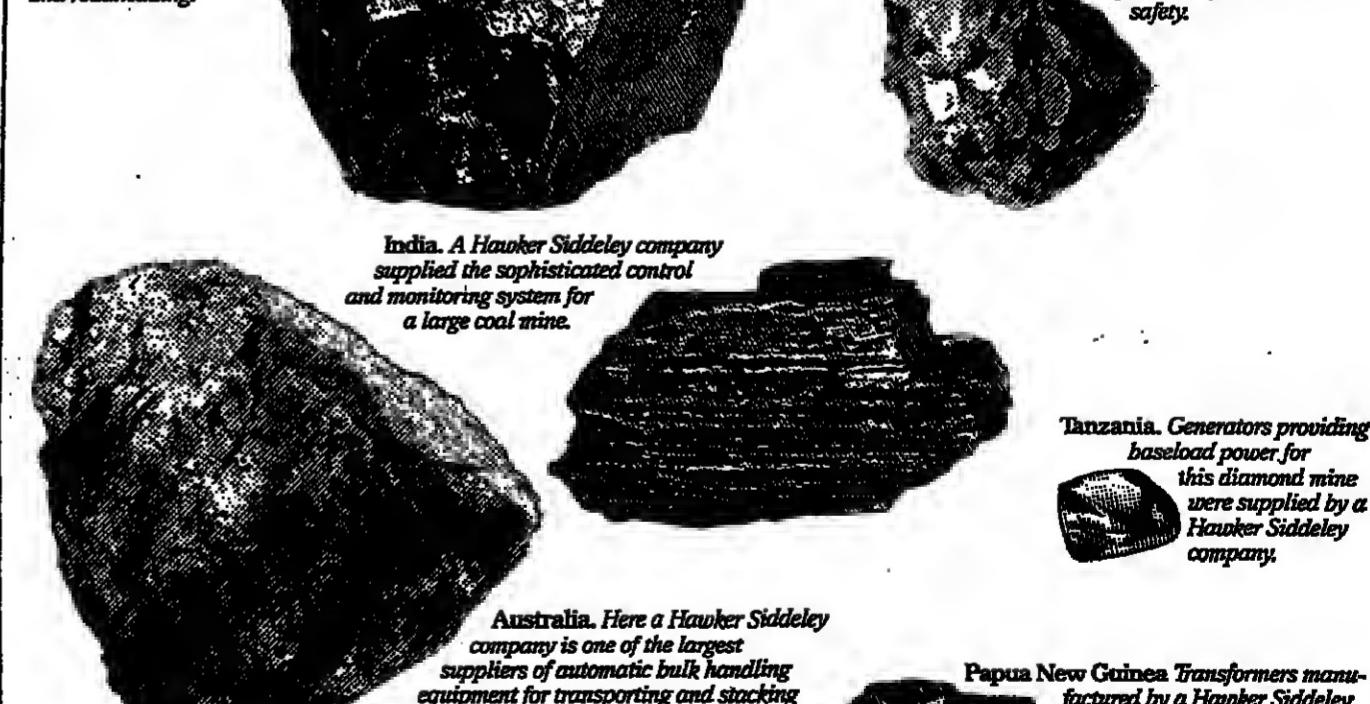
**ONE SOURCE. ONE FORCE.**  
**Davy McKee**

Davy McKee is currently executing contracts to design, supply, install and commission the headgears, cage winding and mine car handling systems at two of the Selby mine sites, Riccall and Stillingfleet. Davy McKee provides a total capability from initial concept to complete complex. Services include research and development, feasibility studies, design, engineering, project management, procurement, construction and plant operation.

**Davy**  
A Davy Corporation Company

**Fighting the trend**  
CONTINUED FROM PREVIOUS PAGE

Europe. Cutting equipment supplied by a Hawker Siddeley company to a European iron ore mine, is also used extensively worldwide for quarrying, tunnelling and roadheading.



All round the world, beneath the surface—and above it—Hawker Siddeley equipment is constantly at work in underground and opencast mining.

We manufacture a comprehensive range of transformers, switchgear and fusegear, motors, control gear, batteries, lamps, mains and standby generating equipment and roadheading and mining machines.

Sharp, sarcastic and guarded in public, he can be both hilarious and funny (as a mimic) and charming in private.

His permanent home, where his wife and daughter live, is near Barnsley and is a medium-sized detached house. He keeps his private life rigorously private, never projecting his family into the public gaze as did his predecessor, Lord Gorsey, with his wife Neddy.

Hawker Siddeley control and monitoring systems and instrumentation are in use in some of the world's most sophisticated and technologically advanced opencast and underground mines.

Our transport systems include bulk handling equipment for underground and surface use as well as machinery for coal/ore preparation and storage.

The companies that manufacture and supply this equipment are names that are renowned in the mining industry: names like Brush, Oldham, Westinghouse and Doco.

Send for the brochure giving the full story and details of all the equipment and services available to the Public Relations Department at the address below.

**HAWKER SIDDELEY GROUP**  
PUBLIC LIMITED COMPANY

32 Duke Street, St. James's, London SW1Y 8DG. Telephone: 01-930 6177. Telex: 587151.

Hawker Siddeley Group supplies electrical and mechanical equipment with worldwide sales and service.



## The UNDERGROUND movement



Becont 100 h.p. Roadrailer and Monorail Locomotive Systems are well established in British Mines and are proved to be safe, efficient and economic. As well as Roadrailer and Monorail, Becont offer a comprehensive range of conventional rail equipment. From this range Becont are supplying to the Selby Complex Special Material Cars and 150 h.p. Rack Adhesion Locomotives.

Becont also provide a full Consultancy Service for Men and Material Transport Systems.

**Becont (G.B.) Limited**

Hallam Fields Road, Ilkeston, Derbyshire DE7 4BS, England.

Telephone Ilkeston (0602) 302603.

Telex 37526.

## Profit from Dowty In-depth Technology

The largest British manufacturer of longwall equipment is pleased to be supplying roof supports and conveyors for Selby.

Congratulations and best wishes to all concerned with this great endeavour.

**DOWTY**

Dowty Mining Equipment Limited, Ashchurch, Glos.  
Dowty Meco Limited, Worcester.  
Dowty Hucknall Limited, Hucknall, Notts.  
Companies Worldwide.

AT SELBY... A TRAIN LOAD OF COAL  
EVERY 20 MINUTES WILL BE DELIVERED BY  
THE MOST POWERFUL STEEL CORD BELT  
CONVEYOR IN THE WORLD... DESIGNED  
AND MANUFACTURED BY...

**Anderson Strathclyde PLC**

By appointment to NCB of Fife.

Anderson House, 47 Broad Street, Glasgow G40 2CW, Scotland.

Telephone: 041-554 1800. Telex: 778109.



## Henry Boot

In our long association with the National Coal Board, Henry Boot has successfully undertaken a very wide range of projects with many specialised operations demanding tight programmes and complex planning. Our considerable knowledge and experience in this field has lead to a close understanding of exacting NCB requirements and an efficient working relationship.

We are proud of our achievements for the National Coal Board and look forward to continuing our association.

**Henry Boot Civil Engineering Limited**

Dronfield, Sheffield, S18 6XN. Tel: 0246 410111 Telex: 547079 and Manchester, Birmingham, Hitchin, London

**NCB**

## SELBY COAL FIELD VI

Difficulties have been overcome by close teamwork

### Management successes based on partnership

EVERY CHRISTMAS for the past seven years, Mr Michael Eaton, North Yorkshire area director of the National Coal Board, has been bringing the house down with his after-dinner speeches in a Yorkshire country hotel.

The popularity of the dinner is a testimony not only to Mr Eaton's eloquence but to the success of the Selby project as a partnership between the Coal Board and its outside consultants and contractors.

The dinners are arranged by W.S. Atkins and Partners, consulting engineers for all the surface aspects of the Selby project. The guests include top managers from the NCB, architects, quantity surveyors and a host of engineers.

Some of the contractors represented at the dinner usually see each other as bitter competitors. But according to one of the recent participants, their differences have been submerged by their awareness of the scale of the project, the problems it has presented, and the credit it is bringing to British industry.

W.S. Atkins is brought in as consultants because Selby was the first virgin territory to be exploited by the National Coal Board and because of the complex environmental difficulties which had to be surmounted to win planning permission.

The company is no stranger to very big projects. Among those with which it has been involved are British Steel's Redcar works; the Drax power station and its extension; the M11 motorway and parts of the M25.

Its biggest scheme so far, costing three times as much as the Selby coalfield, is the SNS steelworks in Algeria.

Atkins' involvement at an early stage in Selby is one reason given by Mr Ken Drobis, its director of UK projects, for the creation of what is effectively a joint interested team consisting of men from Atkins and the NCB. At the latest count, 56 men are based in the Selby area, headed by Mr Peter Hammond, project director.

There is a further reason for the fact that the team spirit is still strong even though there are now far more contractors than in the early years. This is because, as Mr Michael Eaton put it recently: "As the project gains momentum there is more good news."

He is referring mainly to the beginning of commercial coal production which, after some delays, is starting to ease the whole project's cash flow. "On

some parts we are a year behind and in some parts we are two years behind. But for the past three years we have been catching up and may beat that final deadline for full production," he said.

The longest delay has been at Selby where the men sinking the shaft struck very strong water pressure 500 feet down. To pay for this delay, additional coal is to be extracted from the four other mines although this cannot be done for very long.

The responsibility for solving all these problems and ensuring that physical and financial targets are met falls on Mr Trevor Massey, Mr Eaton's deputy, who took charge in October 1981, following the retirement of Mr Bill Forrest, the project's first director.

#### Meetings

One of the few men who can see the state of the entire project at any one time, Mr Massey is assisted by a special team of NCB engineers working alongside the main contractors and who provides a lot of technical input. Above them is a representative of the board's technical staff.

Elaborating on the management structure, in the March issue of the magazine "Achievement" Mr Massey said that because of the many elements of the project, involving multi-contract electrical, mechanical and civil engineering work, it was found very effective to have weekly meetings with all the contractors.

In addition to being progress meetings they were also "com-

munity meetings to get the end result right." This often involved one contractor allowing another on to the same site.

Mr Massey also brought about changes in the organisational structure to take account of the beginning of coal production. "Previously the project had been run in isolation from the NCB's area organisation because of the absence of a mining element. Where I arrived that element had started so we have now become far more integrated into the area in preparation for the many services that will be

required," he said.

The close integration of the Atkins team is due largely to the fact that it was brought in sufficiently early to influence the project.

Mr Fred Roulston, Atkins' sub-project manager at the Gascoigne Wood drift site, is among those brought in after the 1974 public inquiry. At that time, the Atkins engineers were given their brief for the handling of the coal on the surface by Mr Forrest, who had set up the NCB project management team at Allerton Bywater, the North Yorkshire area headquarters.

Atkins' early work for the Gascoigne Wood site centred on the phasing of the development contracts and then breaking them down into "packages" which ensured that too many contractors were not working at any one time.

The main packages involved opening up the site roads; civil engineering for the run-of-mine facilities, the two drift conveyor drive houses, the stockyard, and the foundations. The contract for Gascoigne Wood's



Trevor Massey, weekly meetings.

amenity block stores and electricity sub-station were dealt with separately at an early stage.

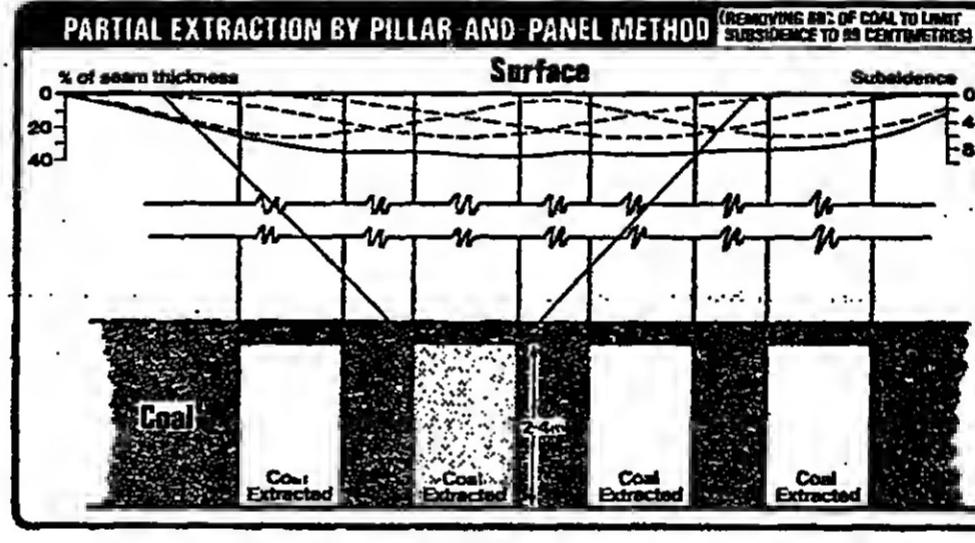
The quality surveyors for the Gascoigne Wood site were Walker, Trotter and Partners, Leeds office, with another Leeds partnership, Faithful and Gould, providing similar services for the five shaft sites associated with the project. Architects for the scheme were Shepherd, Ross and Hickling of Wakefield.

In choosing its own project managers, Atkins says it preferred to pick "the right man of experience" and to "put men before computers rather than stick to management control systems."

Atkins also instructed its design teams to control costs by monitoring them as they were revealed on their drawing boards.

One innovation for which Atkins claims credit concerns insurance for contractors. On winning a contract, engineering companies usually take out their own all-risk policy. In this case, a blanket insurance scheme was worked out by Atkins with a consortium of seven insurers and each contractor had to take out the same insurance contract under identical cover.

Maurice Samuelson



## Computers monitor the system

"THE MINES are absolutely stuffed full of microprocessors and sensors," Mr John Blackwood, electrical systems engineer for North Yorkshire, said. The National Coal Board has spent more than £20m on the computer hardware and electronics that are used to monitor and control much of the mines operations.

The heart of the computer system is at Gascoigne Wood where all the coal is extracted. Not only does this system monitor the operations of the drift mine but it can also take information from the individual computers at any one of the five

shaft mines in the coalfield. It can provide management with long-term trends on coal production and the performance and maintenance requirements of the coal-cutting machinery and the conveyors which remove the coal.

The computer system which has been installed by Westinghouse Brake and Signal, part of Hawker Siddeley, runs MINOS software developed by the NCB's own research department. MINOS stands for Mine Operating System. It is basically a set of programmes which can be used to run various aspects of coal mining.

Though MINOS has been introduced in several other mines, it has not been used on such a scale as the Selby project before. Indeed it would be difficult to co-ordinate all the mining operations such as the starting up of conveyors in the correct sequence without computers, especially as the entire coalfield will employ only 4,000 people.

The complete computer system consists of six control centres—one for each mining site—operating 20 computers linked to a total of 380 outstations for monitoring plant and machinery. At each control centre is an operator's console with colour visual display units, DEC PDP 11 computers and Weddin telemetry master stations connected to underground stations.

The main functions of the centres are control coal clearance from the working faces to the bunkers and conveyors, control and monitoring of the underground environment and control of fixed plant and other ancillary equipment. The same computer controls both the coal clearance and conveyor controls.

**Warnings**

The individual control rooms monitor sensors at key points around each mine site. The computers have the ability to turn off equipment or power if, for example, there is a build-up of methane gas. Even before it reaches such a dangerous level, warnings will appear on the visual display units in the control room, and ventilation is increased to remove the problem.

One of the computers at each centre acts as a standby to the three primary systems. Another machine gathers and processes information from the main control system to present local management information such as coal production figures, maintenance schedules, timekeeping and machine failures. All the data gathered at the computer centres at the five shaft mines is also sent to the overall computer management system at Wistow as part of a £2.75m contract won by James

Howden. This includes identical installations at two other shafts.

Monitoring devices such as for airflow, pressure, temperature, vibration, fluid levels and pressures, fire detection and actuator position are fitted to each fan and linked to the computer. The fans are fitted with autoreversible pitch mechanisms so that airflow can also be altered by the computer.

Also at the Wistow mine, the NCB ran tests of a computerised stock control and maintenance system which could be expanded to cover all the other sites if it proves successful. In this case the NCB has chosen an IBM computer.

Apart from the central control unit, microprocessors appear in much of the machinery such as the coal face machine which basically consists of a shearer which cuts the coal from the seam at the face and at the same time loads it on to a steel conveyor along the face.

Only one operator accompanies the cutter on its run. His main task is to keep the cutter in the coal seam though this is done automatically with some of the machines. A computer can detect the natural gamma radiation from the rock strata above and below the machine and adjust the cutting head accordingly.

The equipment for one face alone costs about £4m and each of the five mines will have at least four faces. The computer and ancillary equipment totals some £20m.

The 4,000 people that Selby will employ when fully operational is quite a small number considering the total size of the coalfield. Environmental monitoring has therefore become an important factor and Selby is stuffed full of sensors to check for any possible hazards to life through gases and fire. The NCB is proud, and rightly so, of its safety record.

Environmental parameters such as methane, carbon monoxide, smoke, air flow, temperature, humidity, and transmitted to the surface at various mine sites and transmitted to the Gascoigne Wood drift mine control centre for weekend and holiday periods.

Elaine Williams

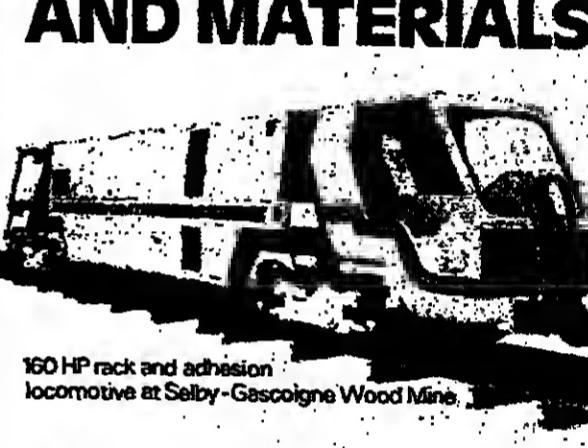
**Davis Derby**

Signalling      Communications

**Total Capability**

**John Davis & Son (Derby) Limited**  
Alfreton Road, Derby DE2 4AB, England  
Tel: Derby (0332) 41671. Telex: 37360 Davis G.  
A Honeywell Technology Company

## GMT TRACTION MOVING MEN AND MATERIALS



GMT using high technology in rolling stock and locomotives for Britain's coal mines of the future.

**GMT** DYNA MINING TRANSPORT LTD  
DYNA RAIL SYSTEMS LTD  
DYNA ROLLING STOCK LTD

**Babcock-Moxey Ltd**

suppliers of

Coal Handling Equipment

to the

**NATIONAL COAL BOARD**

for the Selby Coalfield

**CONVEY THEIR CONGRATULATIONS**

on the mining of the first

Production Coal

**BAC**

**BABCOCK-MOXEY LTD.**

Babcock House,  
Bristol Road,  
Gloucester, GL1 5RT.  
Telex: 0452 36531. Telex: 43412.

A Babcock International company

**MIVAC**  
flameproof switchgear  
chosen exclusively for  
the underground supply  
system at SELBY

GEC are pleased to have been selected to supply the MIVAC range of vacuum flameproof switchgear for the Selby project and for other important N.C.B. installations

GEC High Voltage Switchgear Ltd.,  
PO Box 132, Trafford Park,  
Manchester

## SELBY COAL FIELD VII

Huge efforts have been made to ensure that the surface sites and workings themselves are as unobtrusive as possible

### Blending with the landscape

DURING THE public inquiry into the Selby project in 1975, both the Coal Board and the local authorities agreed that it should cause the minimum inconvenience and disturbance to the area and those who live there.

The result is likely to be recognised by future generations as the most self-effacing coalfield ever developed. No ugly mounds of coal or spoil will dominate the landscape; no contaminant air with dust; the winding gear of the five mine shafts, tallitale monuments to the coal industry all over the world, will be encased in special buildings; the shaft site buildings will be limited to a height of 98 ft compared with 150 ft in some coalfields; and the coal will all be taken away by rail direct to the power stations.

The buildings around the mine shafts have been developed with the intention of blurring the difference between industrial and non-industrial architecture.

The drift mine site at Gascoigne Wood, which contains the most plant-oriented buildings, such as the bunkers and huge storage shed, has been specially chosen not just because of its proximity to the railway, but also because of its relative remoteness from habitation. Even so, it is partly concealed by landscaped embankments.

Another change, which has already been completed, is the opening of new rail tracks to divert part of British Rail's East Coast main line from London to York. With it, the Coal Board would have been unable to mine 70m tonnes of coal which lay below the original stretch of track.

The first length of main line track to be built in Britain this century, it had to be pavilioned, operational and cost £60m to build. The Coal Board claims that it is more suitable for high-speed inter-city trains than the stretch it replaced.

All these are minor factors, however, compared with the subsidence which is an inevitable consequence of deep mining. Local people feared it would weaken the fabric of buildings, including the 12th century Selby Abbey, the town's main landmark.

Even more worrying was that of the River Ouse flooding both in the town itself and the rich, flat farmland which covers the coalfield.

The Coal Board therefore accepted the inquiry's ruling that the mining should be carried out in such a way to limit subsidence to 99 centimetres. This, it said, must be the reasonable maximum which could not be exceeded without the consent of the North Yorkshire councils planning officer.

The Board will limit the subsidence by using the "panel and pillar" method of partial extraction which enables the NCB engineers to achieve a regular pattern of fairly even



Fithead buildings at Wistow, a complete contrast to the stark and ugly buildings at most older pits.

subsidence over a wide area.

The pattern will be broken by the pillars of coal which will be left to support special features such as access roads, and the foundations of Selby Abbey. As a result the Coal Board will extract less than half the 600m tonnes available in the coalfield's rich Barnsley seam.

Despite the limitation of subsidence, this still leaves a wide range of problems both for farmers and for the water authorities.

#### Drainage

Subsidence quickly begins to affect the drainage of fields, causing ponds to collect where they are not wanted, upsetting the existing pattern of drainage courses. New drains cannot be laid out until subsidence is completed, but in the meantime flooding can be countered by the installation of pumps, by local drainage boards.

In the Wistow area, five small pumping stations have been constructed for installation in the next five years.

But while work in the fields can be delayed until the subsidence is completed, work on river banks has to be carried out in advance of the subsidence so that flooding is prevented.

This means immediate attention to the defences of the River Ouse, Yorkshire's major waterway, which snakes its way through the site of the new coalfield and the centre of Selby.

The Ouse, with a catchment area of 3,100 sq km, is tidal as far inland as York and the level of its bed can rise or fall by

more than 1 metre a year because of silt.

At Selby, the spring tide levels can range between three and 18 feet, compared with a four foot range at York and up to 20 feet at Goole.

The brunt of these problems falls on the Yorkshire Water Authority, which had been trying to strengthen the defences of the Ouse since the 1960s because of an apparent rise in annual tide levels.

Its engineers also draw on 50 years of experience coping with subsidence in the Doncaster mining area which in some places can be up to four metres.

The River Don improvement scheme, undertaken over a 20-year period before the Second World War, was the first project of its kind in Britain. The Authority sees the works on the Ouse as a similar challenge.

By the time the Coal Board's application to develop Selby had been submitted in 1974, the Authority's tidal defence works on the Ouse approached its town and defences in the town itself had already been raised.

The prospect of the land—and the river banks—subsiding by another metre meant that the river's defences had to be quickly raised by at least that amount.

The first danger point was in the vicinity of the Wistow mine, where the effects of subsidence will start to be felt in about a year. The Authority will raise the Ouse's banks in this area with 5ft dredged from the river bed.

In the autumn work will also begin on building a three-mile-long inland embankment. This will serve as a second line of

Maurice Samuelson

defence should the Ouse flood the area contained by the large bend immediately upstream from Selby town. The embankment will be up to six metres high in places. Because of rising subsidence, the Coal Board will pay for the equivalent of one metre of its thickness.

It will consist of earth and "run-of-rain" material brought from the Wistow mine and take two years to complete. It will cost the Water Authority £3.5m and the Coal Board £1.3m.

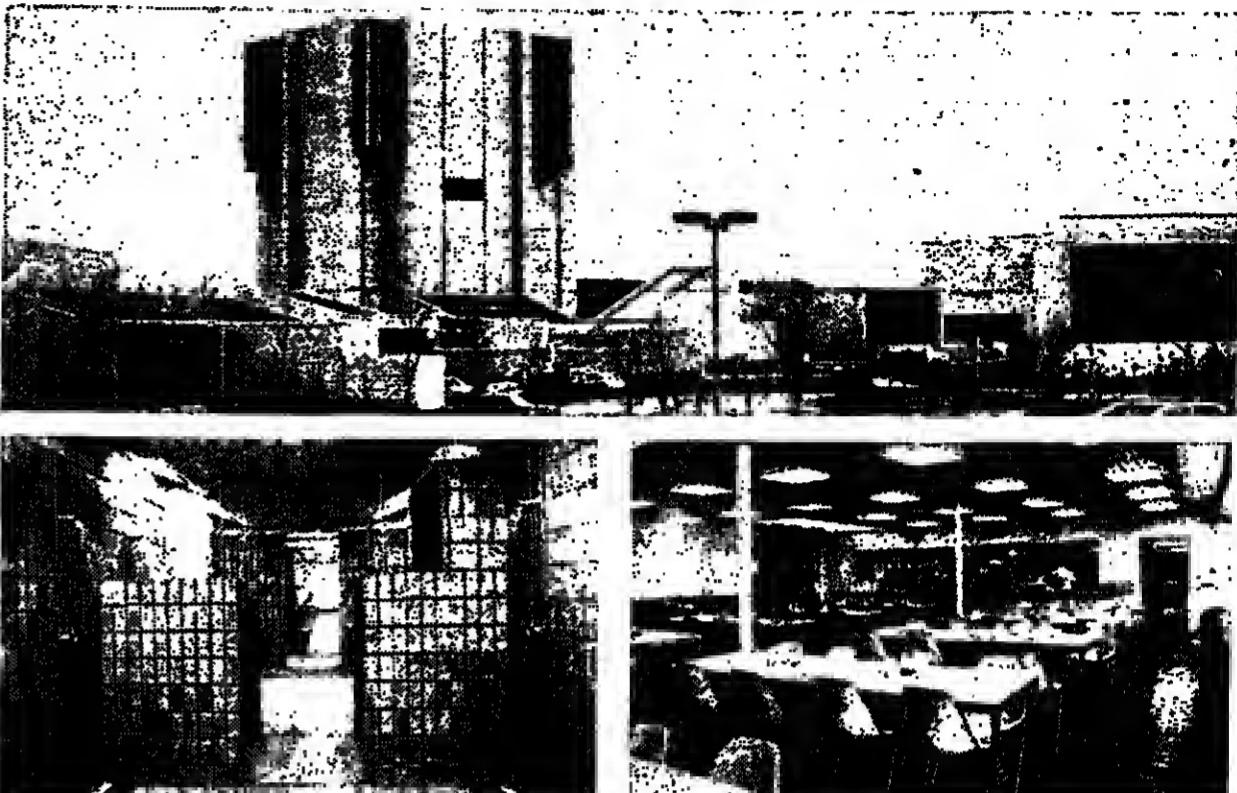
The embankment will not only protect two-thirds of the landward bank of Wistow and the Ouse, but will also prevent Selby town from being flooded from the fields behind it.

Mr Guy Rubin, in charge of the Yorkshire Water Authority's rivers and land drainage division, says: "The threat of Selby being flooded had been at the back of my mind for 10 years. By raising the banks in the town centre, the authority had already sealed its front door and the embankment across the fields would now seal its back door as well," he said.

"We would have wanted to build this embankment anyway," he says, "but our minds were concentrated by the start of coal mining and by last year's flooding danger." (Although the river overflowed its banks they were not breached, he stresses.)

Later, further flood defences will be required on the other side of the Ouse when mining starts at Riccall, Stillingfleet and other pits in the Selby field.

## Making the miners' lot a better lot!



We constructed all of the surface works and buildings for the NCB's new Wistow mine at Selby. Our work was crucial to the rapid development of the project, and we completed the main winder tower (top picture) three months ahead of schedule! The amenities building has certainly made the miners' lot a better lot, as shown by the bath house and canteen interiors.

## Sir Alfred McAlpine & SON LTD.

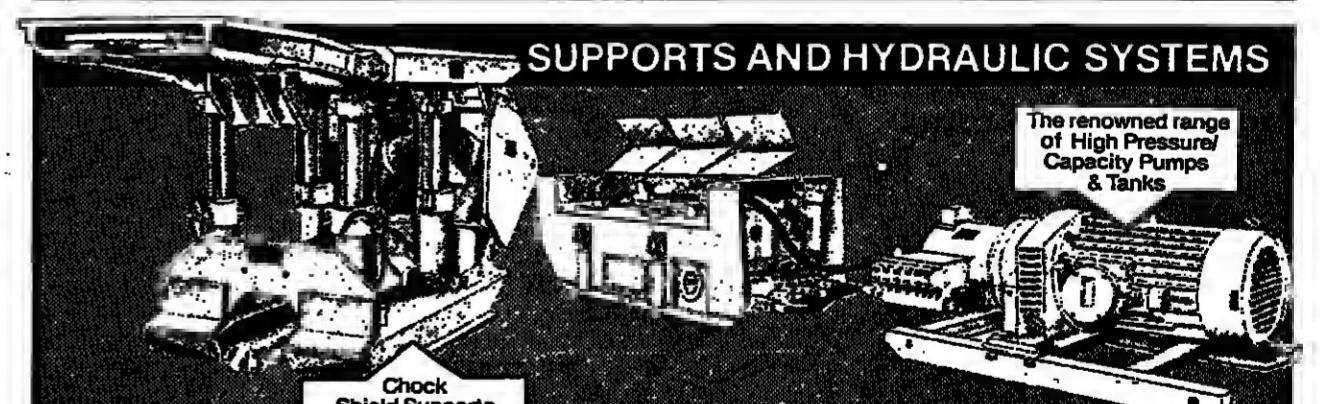
HOOTON - SOUTH WIRRAL - CHESHIRE L66 7ND  
Telephone 051-339 4141 - Telex 627185

## FSW GROUP

### MATERIALS HANDLING



Full range of Bunkers — Static, Moving Bed or Strata.



SUPPORTS AND HYDRAULIC SYSTEMS

Chock Shield Supports.



FLETCHER SUTCLIFFE WILD LTD.  
Horbury, Wakefield, W. Yorks. WF4 5HR.  
Telephone Horbury 0924 276363. Telex 55320

## RACKATRACK

Wistow Mine installs Rackatrack Chainless Haulage on A1's & D1's —  
THE PROVEN EQUIPMENT  
Identical to Kellingley Colliery, Record Holder of National and European weekly output 32,333 tons.

PITCRAFT SUMMIT LTD.  
Platts Common Industrial Estate,  
Hoyland Nether, Barnsley, S. Yorks.  
Telephone Barnsley 744135 (10 lines)  
Telex 54554 Pitcraft Barnsley



## MARKHAM

### On the surface

#### MINE WINNERS, BRAKES, HEADSHEAVES

Markham are proud to have supplied equipment for the Selby project.

- 3 main shaft friction winches.
- 3 double-drum sinking winches.
- 1 drive head for cable belt main conveyor.
- 2 barrels for reclaimers.
- 1 shaft sinking platform winch.

Markham - the leading name for winders and tunnelling machines since 1872 with unparalleled experience in both.

We look to the future and the greater use of tunnelling in the mines.

### Underground

#### TUNNELLING MACHINES ROADWAY SUPPORTS STOWING MACHINES



Markham & Co Ltd

Broad Oaks Works,  
Chesterfield, Derbyshire S41 0DS, U.K.  
Telephone: (0246) 76121 Telex: 54263

JOHN BROWN

New standards

Clive Crawford, a 39-year-old Cambridge-trained architect, who has been involved with the design for the Selby project for eight years, says it sets a whole series of new standards for the coal industry.

He says: "It's a matter of the needs to 'blend' the differences between industrial and other forms of architecture."

Crawford first became involved in the project when working for Sheppard Fidler, of Epsom, in the mid-1970s and took part in the 1975 public inquiry on it.

When he moved to Fletcher Ross and Hickling of Leeds, Crawford retained the responsibility for designing the surface buildings of the five shaft sites.

The Gascoigne Wood design work remained with his old firm, now called Atkins, Sheppard Fidler.

In developing architectural design for the buildings on the sites, Mr Crawford says there were two overriding objectives:

• To generate a series of buildings which in form, silhouette and massing, are reasonably sympathetic to the rural environment.

• To use a limited range of materials and details "to apply a similar architectural vocabulary to all the buildings on the sites and achieve a consistent image around the sites."

The design and layout of the shaft sites represent a compromise between their functions and the demands of their surroundings.

The largest shaft-site building is the friction winder tower located over the downcast shaft at Wistow, and over the upcast

shaft on the other sites. Its height was limited, in the planning consent, to 96 ft 8 in or less.

In designing the friction winding tower, Mr Crawford says he aimed to break up its large volume "to create a building which is interesting both in plan, form and silhouette."

The result of this approach is the mixture of flat and pitched roofs and the massive stable walls contrasting with ribbed aluminium sheeting which are used both on the roofs and for wall cladding.

However, the colours vary considerably from one site to the next. At Winstow and Whitmoor, the mainly concrete blockwork is golden brown multi-brickwork; at Stillingfleet smooth red brickwork; at North Selby it is red brown multi-brickwork.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

A few miles away, at Gascoigne Wood, where the Selby coal reaches the surface and is loaded on to merry-go-round trains to the power stations, the huge storage shed makes a much larger dent in the skyline.

But here too, the effect of the environment has been softened by subdued colourings and contours of the buildings, the sheer remoteness of the site, and the grassy mounds which screen it from a distance.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet, Riccall, Whitmoor, and North Selby.

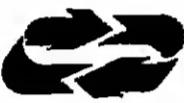
The buildings at Wistow represent one of the five sites from which miners will descend to work the Selby coal field. The others are at Stillingfleet

# LONGER STRONGER FASTER

**BTR  
SILVERCORD  
CONVEYOR  
BELT**

BTR's "Silvercord" steel braced conveyor belt in the South Drift at Selby is the longest and strongest in the world. It travels at speeds of 30km per hour over 15km, with a rise of 1000 metres. Carrying loads of 3,200 tonnes an hour up inclines as steep as one in four requires extremely high operational tensions. The specified strength of BTR's Silvercord is 7,000kgs/cm - a 13% improvement on any other conveyor belt.

The Silvercord belt at Selby was developed in conjunction with Anderson Strathclyde and is part of a comprehensive range of BTR conveyor belting in use throughout the world. BTR is now working on an even longer and stronger Silvercord belt.



**BTR Belting Limited**  
conveying technology worldwide

BTR Belting Limited, P.O. Box 3, Centurion Way, Farnworth,  
Leyland, Preston, Lancashire PR5 2RE.  
Telephone: 077-44 33751 Telex: 67530 BTRLEY G.

A Member of the BTR Group of Companies

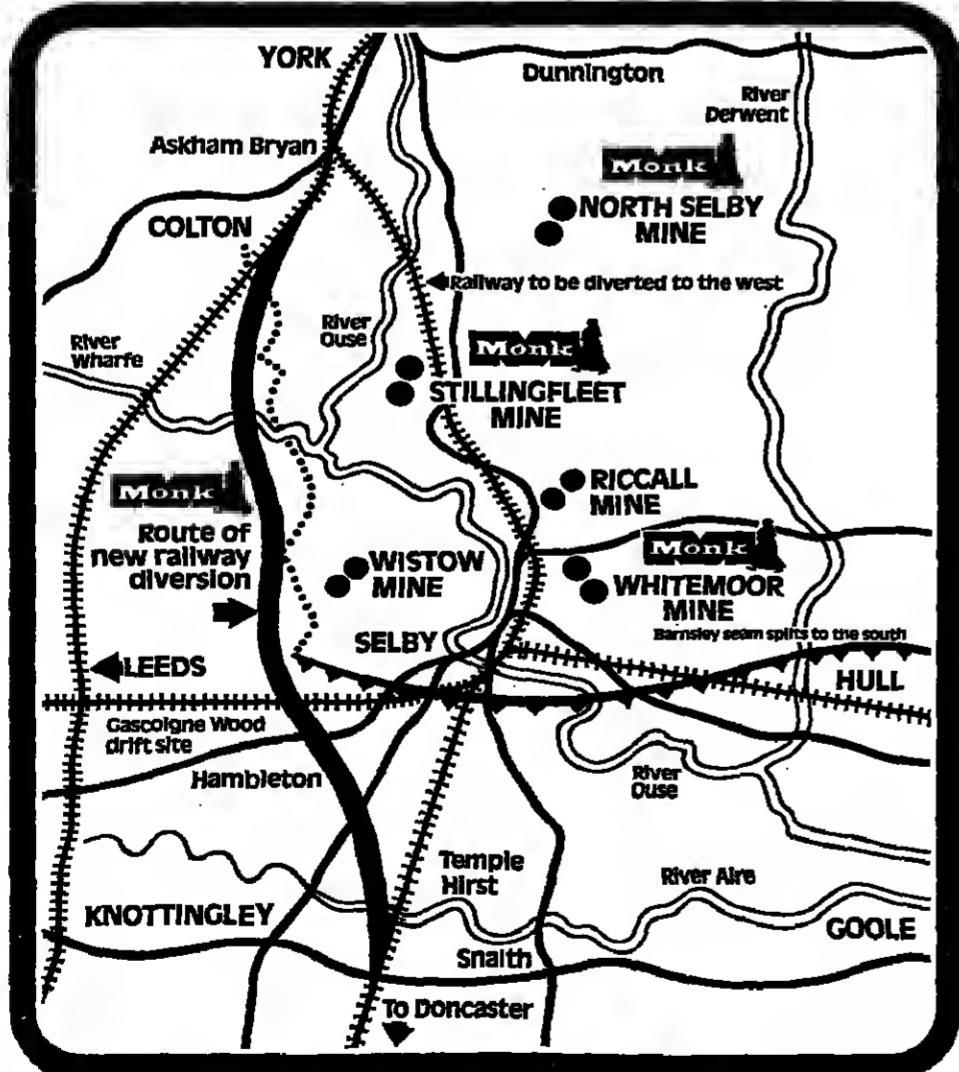
## Fuel for thought

In the first major contract for construction of a new main line railway track since 1896, Monk has helped BR to get well away from the mining area of the new Selby coalfield. When it is completed, the two track line will be part of the main high speed route from King's Cross to the North.

22.8 Kilometres in length, the project includes 12 bridges carrying roads over the railway, one bridge carrying the railway over the road, one 3 span bridge over the Selby Canal, a bridge carrying the Leeds-Selby railway line over the new main line, one 26-span viaduct over the River Wharfe, and an 18-span viaduct at Selby Barn.

The whole contract was awarded to Monk and was completed at the end of December 1982.

In addition Monk has carried out the construction of roads and site works for the National Coal Board at three mines in this new coalfield.



**Monk**  
Building and Civil Engineering Contractors

A. Monk & Company, p.l.c. Head Office: P.O. Box 43, Warrington, Cheshire WA1 4JB. Tel: Padgate (0925) 812000 Telex: 628293  
Areas Offices: Boston Spa, Middlesbrough, Neath, Stamford, Stirling, Tiverton & Warrington.

## SELBY COAL FIELD VIII

### Solving problems for benefit of the community

THE IMPACT of the mine development on local communities and North Yorkshire's economic infrastructure is one of the imponderables in the whole scheme and one which will become clear as the 1980s progress.

However, some effects have already emerged and many of the overall benefits and some of the potential problems for which solutions might have to be sought are known.

In a nutshell, the development means new housing programmes, the attraction of some companies to service the NCB project, greater pressure on local authority services—many of which were already earmarked for expansion—a stimulus to shopping and other service trades, and the eventual emergence of miners' dependents for whom new employment will have to be found.

The impact of the development will be minimised by two facts. One is that most of the 4,000 miners who will be working at Selby will come from the older West Yorkshire mining areas around Wakefield, Dewsbury and Leeds, and some of these will keep their homes there. There will be some local recruitment for miners and mining trainees though as well as canteen, secretarial and engineering staff.

The other is that some companies which service the NCB are located in West and South Yorkshire and will not wish to move to North Yorkshire.

Every six months the NCB has been holding a public forum. It has an information centre at Selby and its officials regularly talk to parish councils. This is on top of a series of structural meetings between the Coal Board, local authorities, the water authority and British Rail on environmental issues. Underneath it all too is



The abbey in Selby. The town's population could go up by half, some planners believe

a considerable amount of joint planning on housing requirements between the NCB, local authorities and housing associations.

A research team under Prof. Katharine Jones, head of York University's Department of Social Administration, studied the project for three years but

had its research effectively halted by the Department of the Environment which had commissioned the study. The team appeared to have been moving to the conclusion that local authorities needed the protection of central government. In their dealings with the powerful NCB, The research project, however, was scrapped before its views could be tested.

Mr Michael Cuff, North Yorkshire County Council's industrial development officer, says the project will inevitably lead in the long term to a significant increase in the available labour force which will not necessarily be absorbed by the coal field.

The problem is managing growth in a rural area and coping with the economic well-being of such a big influx of people.

The Coal Board says that up to now it's been "more of a marriage than a take-over" and that's the way it wants it to remain.

Some of the first and most tangible effects of the project are being seen in housing. The NCB and the local authorities have a policy dispersing the development, though Selby, Sherburn-in-Elmet, and the southern outskirts of York will probably take the biggest concentration of new families.

"Integration" is partially designed to prevent the development of sprawling miners' housing estates as at nearby Knottingley more than 20 years ago.

It is thought that a third of the miners will travel daily from their existing homes outside North Yorkshire though this is expected to decrease gradually. A requirement for 1,000 new houses for miners, split equally between the local authorities and housing associations with some NCB financial assistance — was identified initially.

The Coal Board and the local authorities however were working on the basis that demand was likely to be one privately-owned house for every one for renting. It has so far turned out to be two privately-owned to every one rented. So companies like the house builders Barratts appear to be doing well.

The North Yorkshire structure plan already envisages the building of 3,800 new houses in and around the Selby area between 1987 and 1990 to cope with population changes and alternative demand, and 8,300 in the whole of the area from south of York to the north of Doncaster.

Some planners think the population of Selby and the three surrounding parishes—now 20,000—could go up by as much as a half. A new 30,000 sq ft shopping centre has been planned for some time at Selby and there has been a long-term demand for a new library there which is being met. The character of the Selby area may change noticeably.

Some new companies which start up or expand to service the coal field or to use and convert its products may well come to the private 40-acre enterprise park at Sherburn-in-Elmet. In and around this centre are already a new J. Bibby animal feed mill; an Elico Power factory and the KwikSave distribution outlet at a nearby plant formerly owned by Avery.

The NCB says some local industries feared that the development would push up wage rates but that has not happened so far.

Nick Garnett

### Meeting a challenge

PROFILE: TREVOR MASSEY

"I do not know anything more exciting than a team of men at a coalface working right," says Trevor Massey, 48, the mining engineer in direct charge of the Selby development since he was appointed Deputy Area Director (Mining—Selby) in September 1981.

Mr Massey's love of the technical aspects of mining emerges strongly, as does his belief that someone in his position overseeing such a huge project should go out and about as much as possible where the action is taking place.

As a colliery manager in the 1960s—after gaining a first-class BSc degree at Leeds University—Mr Massey pioneered the high-speed retreat mining system for the NCB.

"In doing any job I have never found a better way than physically seeing as much as possible. I have tried to keep as many mornings free as I can to see sites."

"The challenge is to show that with a new mining complex and the management, men and machinery we can do as well as anyone in the world. I like to keep my mind open and believe that we don't know what the ultimate that is achievable is."

One of his biggest tasks given the size of the project and the number of contractors involved, is to take an overview and see where what he calls the "pinch points" might arise.

"This project is different from managing an area of pits because in routine mining you tend to face repetitive problems. Here we must be prepared to face new problems. From time to time we get very testing periods."

One of them was the flooding which hit Wiston drift.

Colleagues with local communities and their local authorities, and the job of settling people's minds on the impact of the project on the area has been an important part of the work, he says, but he is "very much a production man."

Trevor Massey lives in an old manor house with hens and some bees at Hemsworth near Pontefract. But he says he has no hobbies and it is the Selby development which has dominated his life over the past two years.

"My intention is to get the job done, and as quickly, cheaply and efficiently as possible."

M.S.

PROFILE: DEREK ELLIS



Derek Ellis: heading a team of 14 project engineers

As the area deputy chief engineer responsible for Selby, Derek Ellis, 46, is the link between Trevor Massey, the man in charge of the project, and the site representative of the NCB's numerous outside contractors.

In this capacity, Ellis heads a team of 14 NCB project engineers, occasionally taking time off to show the sights to journalists and other authorised visitors.

He catches quickly over "the tremendous morale" of all those involved in the development and speaks sympathetically about the older Coal Board men who sketched the broad outlines of the scheme more than a decade ago in a flash of joint inspiration.

The son of a North Wales mining family, he left school at 16 to join the Coal Board as one of the first indentured apprentices electricians in his area.

He spent 17 years working underground, combining the first seven with attendance on a day release course at Denbigh College where he collected certificates in electrical, mechanical and mining engineering.

In the mid 1960s he left North Wales for North Nottinghamshire, rising to the post of group engineer for five pits. His next stops, before reaching Selby, were at Kent and at Doncaster.

His career thus ranges from some of Britain's oldest pits to its newest. Not all today's miners can expect the mobility of a qualified professional like Ellis. But it says a lot about the way that Britain's coal industry is evolving, showing that while there is bad news for some miners, there is plenty of good news for others.

N.G.

### ELECTRICAL CONTRACTORS TO THE COAL INDUSTRY

**N.G. BAILEY & CO. LTD.**

**Major Projects Group,**  
Cutler Heights Lane,  
Bradford,  
West Yorkshire BD4 5JF  
Tel: 0274-682856  
Telex: 517293



### We're Breaking Records at Selby...

December 1980, Stillington Mine.  
Upcast Shaft - 128.7m of concrete lined shaft completed in 31 days.

December 1982, Whitemoor Mine.  
Upcast Shaft - 131.23m of concrete lined shaft completed in 31 days.

**THYSSEN**  
THE RECORD BREAKERS

Thyssen (Great Britain) Ltd.,  
Bynea, Llanelli, Dyfed SA14 9SU.  
Tel: Llanelli (05542) 2244. Telex: 48194.



### INA BEARING TECHNOLOGY KEEPS SELBY MOVING

INA are proud to be associated with Anderson Strathclyde and Cable Bell in the Selby Coalfield project.

INA bearings are used in the main drive of the conveyor system and in the bend pulleys, where performance and reliability are critical

to the operation of the entire installation.

**Talk to INA**  
NEEDLE, BALL, ROLLER & PLAIN BEARINGS

INA BEARING COMPANY LIMITED,  
Forge Lane, Minworth, Sutton Coldfield,  
West Midlands B76 8AP.  
Telephone: 021-351 3833 Telex: 338304.